

Audit



Report

OFFICE OF THE INSPECTOR GENERAL

INTERNATIONAL COOPERATIVE RESEARCH
AND DEVELOPMENT

Report Number 93-009

October 21, 1992

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The following acronyms are used in this report.

ASD(PA&E).....	Assistant Secretary of Defense (Program Analysis and Evaluation)
DARPA.....	Defense Advanced Research Projects Agency
DISA.....	Defense Information Systems Agency
EUCLID....	European Cooperation for the Long Term in Defence
GAO.....	Government Accounting Office
IEPG.....	Independent European Programme Group
MOU.....	Memorandum of Understanding
NATO.....	North Atlantic Treaty Organization
ODC.....	Offices of Defense Cooperation
POM.....	Program Objective Memorandum
RDT&E.....	Research, Development, Test, and Evaluation
SDIO.....	Strategic Defense Initiative Organization



INSPECTOR GENERAL
DEPARTMENT OF DEFENSE
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ARLINGTON, VIRGINIA 22202

October 21, 1992

MEMORANDUM FOR DEPUTY SECRETARY OF DEFENSE
ASSISTANT SECRETARY OF THE NAVY (FINANCIAL
MANAGEMENT)
ASSISTANT SECRETARY OF THE AIR FORCE
(FINANCIAL MANAGEMENT AND COMPTROLLER)
INSPECTOR GENERAL, DEPARTMENT OF THE ARMY
DIRECTORS, DEFENSE AGENCIES

SUBJECT: Audit Report on International Cooperative Research
and Development (Report No. 93-009)

We are providing this final report for your information and use. Comments to the draft report were considered in preparing this final report and are included in Part IV, Management Comments.

The recommendations are subject to resolution in accordance with DoD Directive 7650.3, in the event of nonconcurrence or failure to comment. We request that you provide final comments on the unresolved recommendations by December 21, 1992. See the "Status of Recommendations" section at the end of the finding for recommendations on which your comments are needed and the specific requirements for your comments. Provide completion dates for corrective actions taken or planned, the completion dates for actions already taken, and the estimated dates for completion of planned actions. We also ask that your comments indicate concurrence or nonconcurrence with the internal control weakness highlighted in Part I.

The courtesies extended to the audit staff are appreciated. If you have any questions on the audit, please contact Mr. Raymond Spencer, Program Director, at (703) 614-3995 (DSN 224-3995) or Mr. Steven Hughes, Project Manager, at (703) 693-0362 (DSN 223-0362). The

planned distribution of this report is listed in
Appendix G.


Edward R. Jones
Deputy Assistant Inspector General
for Auditing

Enclosure

cc:
Secretary of the Army
Secretary of the Navy
Secretary of the Air Force
Director, Test and Evaluation
Deputy Under Secretary of Defense (International Programs)

Office of the Inspector General

AUDIT REPORT NO. 93- 009
(Project No. 1AB-0055)

October 21, 1992

INTERNATIONAL COOPERATIVE RESEARCH AND DEVELOPMENT

EXECUTIVE SUMMARY

Introduction. International Cooperative Research and Development is an acquisition strategy, which has the potential to reduce the cost of weapon systems while achieving interoperability with U.S. allies. Cooperative programs with U.S. allies must be considered before a U.S.-only acquisition process is initiated. The Defense Appropriations Act, U.S.C., title 10, section 2350A, and Public Law 99-145 (Nunn Amendment) provided funds to promote cooperative programs with U.S. allies. The funding averaged about \$112 million per year from FYs 1987 through 1991.

Objective. The objective of the audit was to evaluate the effectiveness of procedures to implement international cooperative research and development programs to reduce duplication of weapons research and development and enhance the interoperability and standardization of military equipment among North Atlantic Treaty Organization (NATO) member nations and other friendly nations.

Audit Results. The DoD was not actively or effectively pursuing international cooperation to meet its research and development requirements. Consequently, the DoD is not fully realizing the potential benefits of lower research and development costs and enhanced interoperability and standardization with U.S. allies.

Internal Controls. The audit identified a weakness in controls over international cooperative research and development programs. Controls were not effective to ensure that foreign cooperation was appropriately considered before initiating a U.S. program. A description of the controls assessed is in Part I.

Potential Benefits of Audit. The audit projected that approximately 150 research and development programs, with an estimated program value of \$93 billion, have the potential for allied cooperation, which could reduce research and development cost and increase standardization for and interoperability with allied equipment. Although the monetary benefits were not readily quantifiable, we estimated the potential benefits to be as much as \$10 billion for FYs 1992 through 1997 if a fully-effective international cooperative research and development program was implemented throughout the Military Departments and Defense agencies. Other benefits of the audit are described in Appendix E.

Summary of Recommendations. We recommended that the Deputy Secretary of Defense delegate authority to the Deputy Under Secretary of Defense (International Programs) to resolve conflicts over the issuance of guidance and establishment of cooperative programs pertaining to international cooperation, task the Deputy Under Secretary of Defense (International Programs) to streamline Memorandum of Understanding processing procedures and expedite the issuance of pending instructions on international cooperation. We also recommended that the Directors of Defense agencies and the Service Acquisition Executives establish internal controls to ensure that program managers evaluate the feasibility of establishing cooperative programs.

Management Comments. The Deputy Secretary of Defense deferred comments on the draft report and will comment on the final report. The Under Secretary of Defense for Acquisition concurred with Recommendations 1.a., 1.b., and 1.c. but did not provide estimated completion dates as required. Recommendation 1.d. that called for realigning the Offices of Defense Cooperation under DUSD(IP) was nonconcurred with by both USDA and the Director, Defense Security Assistance Agency. Based upon the support provided we deleted 1.d. The Directors of Defense agencies concurred in principle with the draft audit Recommendation 2. The Navy and Air Force concurred with Recommendation 2 but the Army did not respond. Comments from respondents are discussed following the Recommendations; their full text are included in Part IV.

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This report was prepared by the Acquisition Management Directorate, Office of the Assistant Inspector General for Auditing, DOD. Copies of the report can be obtained from the Information Officer, Audit Planning and Technical Support directorate, at 703-614-6303 (DSN 224-6303).

PART I - INTRODUCTION

Background

DoD's concept of cooperating with U.S. allies to meet military requirements has historically taken the form of foreign military sales. President Carter's administration first proposed the notion of a "two-way" street between the United States and its allies. Since then, the North Atlantic Treaty Organization (NATO) allies have expressed a need for cooperation and a desire for equal access to American markets. The DoD requires the Military Departments and Defense agencies to consider international cooperative research and development as a preferred acquisition strategy to a U.S.-only acquisition. Starting in FY 1986, Congress provided funds to the Military Departments and Defense agencies to promote international cooperation under the guidelines of Public Law 99-145 (Nunn Amendment) (see Appendix A).

In 1985, OSD issued a policy memorandum, "Emphasis on NATO Armaments Cooperation," on international cooperation. The memorandum stated the objective of cooperation is to obtain economies of scale by coordinating research, development, production, and logistics support programs. The memorandum also stated:

We [the DoD] must leave no doubt of our commitment to attain adequate Alliance conventional capabilities. Cooperative joint research, development, production and acquisition programs will be thoroughly explored . . . [by DoD].

The FY 1988 Defense Guidance supported OSD policy by establishing a DoD goal to have 10 to 25 percent of the research and development budget committed to cooperative programs by FY 1997. However, the FY 1992 Defense Planning Guide defined OSD policy in more general terms with no reference to a stated numerical goal. Various personnel within OSD, as well as some of the U.S. allies, have interpreted that action as evidence that the United States is not committed to cooperative programs.

In 1986, the Secretary of Defense issued a memorandum on NATO cooperative projects to implement the 1985 policy memorandum by assigning responsibility to various departments. That action dispersed decisionmaking authority for identifying, negotiating, and implementing cooperative programs involving research, development, test and evaluation (RDT&E) to the Under Secretary of Defense for Research and Engineering¹ and the Under Secretary of Defense for Policy. The memorandum also tasked the Under Secretary of Defense for Research and Engineering, in coordination with the Under Secretary of Defense for Policy; the

¹ Now the Under Secretary of Defense for Acquisition

Assistant Secretary of Defense (Acquisition and Logistics); the Assistant Secretary of Defense (Command, Control, Communications, and Intelligence); and the General Counsel to develop a comprehensive instruction on procedures for entering into and conducting cooperative arrangements.

The Deputy Secretary of Defense initiated a task force to identify potential cooperative programs among the United States, United Kingdom, France, and Germany. The task force hopes to foster and guide to successful completion selected bilateral cooperative programs approved by the Military Departments. Although the task force is a commendable effort, its focus is not directed at identifying and correcting the problems DoD program managers have in initiating cooperative programs without high-level support.

The need for greater U.S. cooperation is highlighted by the formation of the European Common Market of 1992 and the goals of the Independent European Programme Group (IEPG). The IEPG, established in 1976, is comprised of European members of the North Atlantic Alliance, including France. The IEPG advocates the strengthening of a European industrial base by encouraging members to keep research and development efforts in Europe. Further, the IEPG established European Cooperation for the Long Term in Defence (EUCLID) to identify areas of technological development. EUCLID identified 29 areas for concentrated technological development efforts and has formed active working groups in several of those areas.

Objective

The objective of the audit was to evaluate the effectiveness of procedures to implement international cooperative research and development programs to reduce duplication of weapons research and development and enhance the interoperability and standardization of military equipment among NATO member nations and other friendly nations.

Scope

Our audit consisted of three reviews of the Military Departments' and Defense agencies' research and development programs. First, using a statistical sample taken from 1,667 programs from the FY 1992 through FY 1997 RDT&E Program Objective Memorandum (POM), we reviewed 44 program elements to assess how well program managers were pursuing cooperative opportunities. Second, we reviewed project reports from 64 cooperative programs funded under the Nunn Amendment from 1986 through 1990 to determine the use and status of those programs. Third, we evaluated the Memorandum of Understanding (MOU) process within DoD for 20 cooperative programs, identified by the Military Departments and Defense agencies, in various stages of research and

development from 1986 to the time of the audit. MOUs with one or more major allies of the United States are used to establish cooperative programs. We interviewed personnel within OSD, the Military Departments, the Defense agencies, the Offices of Defense Cooperation (ODC), and the Ministries of Defense representatives in Italy, France, Germany, and the United Kingdom.

This economy and efficiency audit was performed from June 1991 through March 1992 in accordance with auditing standards issued by the Comptroller General of the United States as implemented by the Inspector General, DoD, and accordingly included such tests of internal controls as were considered necessary. The activities visited or contacted during the audit are listed in Appendix F.

Internal Controls

We evaluated internal controls over the procedures established to implement international cooperative research and development programs. We also evaluated controls in the acquisition process to determine whether international cooperation was considered before a U.S.-only program was begun. The audit identified a material internal control weakness as defined by Public Law 97-255, Office of Management and Budget Circular A-123, and DoD Directive 5010.38. Controls were not effective to ensure that international cooperative research and development programs were properly considered. The recommendations in this report, if implemented, will strengthen those controls. The senior officials responsible for internal controls within each Military Department and Defense agency will be provided a copy of the final report.

Prior Audits and Other Reviews

Government Accounting Office(GAO) Report GAO/NSIAD-91-27 "Funding of International Defense Research and Development Projects," (OSD Case No. 8723), October 1990, concluded that the OSD and Navy did not have sufficient internal controls to adequately ensure that funds disbursed for NATO cooperative research and development projects were actually used for the purposes intended and in accordance with authorizing legislation. There were no DoD directives or instructions for the NATO research and development project certification and funding process. GAO recommended that the DoD and Navy issue instructions and establish sufficient internal controls to ensure program funding control. The DoD and Navy concurred but have not implemented the recommendation.

GAO Report GAO/NSIAD-91-167, "European Initiatives Implications for U.S. Defense Trade and Cooperation," (OSD Case No. 8536), April 1991, states that the European Community and IEPG initiatives could foster a greater preference for European firms to conduct defense research, development, and procurement and could potentially exclude the United States. GAO recommended

that the Secretaries of State and Defense improve inter-agency and internal coordination to assess the defense trade implication of European initiatives. The Secretaries of State and Defense concurred but did not implement the recommendations. GAO completed a follow-up review for the House Armed Services Committee hearings scheduled for April 29, 1992.

Inspector General, Department of Defense, audit report, "Audit of Foreign Weapons Evaluation," Report No. 92-049, February 19, 1992, concluded that DoD had not taken full advantage of foreign non-developmental items to meet U.S. military needs. As a result, the Military Departments were not expeditiously fielding state-of-the-art equipment or increasing standardization and interoperability with allies and friendly nations. The report recommended that the Service Acquisition Executives designate an office with authority and responsibility to review acquisition plans to ensure that adequate consideration has been given to foreign non-developmental items and require program managers to purchase existing domestic or foreign systems, subsystems, or components that meet Military Department requirements.

PART II - FINDING AND RECOMMENDATIONS

International Cooperative Research and Development

The Military Departments and Defense agencies have not actively or effectively pursued international cooperative research and development programs to fulfill Military requirements. Instead of designating one office with the responsibility and authority to oversee cooperative programs, OSD dispersed decisionmaking authority among many offices. Further, the Military Departments and Defense agencies have not complied with established policy on considering allied participation before initiating a U.S.-only program. As a result, the DoD will not realize potential savings in sharing research and development costs and enhanced interoperability with and standardization for allied equipment.

DISCUSSION OF DETAILS

Background

The Congress and DoD encourage international cooperative efforts. In 1985, Congress passed legislation (Nunn Amendment), sponsored by Senators Nunn, Quayle, and Roth, establishing funds for the DoD to cultivate international cooperative projects.

DoD Directive 5000.1, "Defense Acquisition," and DoD Instruction 5000.2, "Defense Acquisition Management Policies and Procedures," require the Military Departments and Defense agencies to consider international cooperative research and development as an acquisition strategy in major programs, before beginning a U.S.-only acquisition program. The Deputy Under Secretary of Defense for International Programs is responsible for coordinating MOUs through the OSD and for monitoring requests for Nunn Amendment funds. The Under Secretary of Defense for Policy reviews MOUs to determine if they further U.S. foreign policy or national security interests. Appendix A provides a detailed discussion of policy relating to international cooperative research and development.

Ministries of Defense personnel contacted believe that to the United States, DoD cooperation means foreign military sales and that true cooperative programs will not succeed until the United States recognizes the benefits obtainable by working with its allies. This view is based upon the allies' perception that the United States still has resources to research and develop competing national programs, including classified programs, in parallel with cooperative programs. Further, when the DoD has had to choose between continuing a cooperative program or a competing national program, the cooperative program was canceled. In contrast, allied personnel stated that their national programs are canceled instead of cooperative programs. Allied personnel acknowledged that despite the disappointments of failed cooperative programs with the United States, the United States remains the predominant partner of choice.

Pursuing International Opportunities to Full Advantage

The DoD has not pursued all opportunities in initiating international cooperative research and development programs. We found that opportunities existed in developing acquisition research and development programs.

Potential cooperative opportunities. Of 44 randomly selected acquisition programs from the DoD Research and Development POM for FY 1992 through FY 1997, 3 were cooperative, 27 had the potential to be cooperative, and 14 had no potential. Applying those results to the universe of 318 programs, we projected that 150 program elements, valued at \$93 billion, have cooperative potential. See Appendix B for an explanation of sample results and methodology.

Use of Nunn Amendment funds. DoD provided Nunn Amendment funds to only 64 research and development programs that were initiated or ongoing from FY 1986 to FY 1991. Most programs receiving Nunn Amendment funds were nonmajor programs. After exhausting Nunn Amendment funds, the Military Departments continued to support 24 of 41 cooperative programs as shown below.

Status of Cooperative Programs (FY 1986 - FY 1991)

<u>Number of Programs</u>	<u>Status</u>
23	Still receiving Nunn Amendment funds.
24	Continued after Nunn Amendment funds were exhausted.
7	Discontinued after Nunn Amendment funds were exhausted.
7	Terminated by DoD.
3	Terminated by allies.

Since the funds were established in 1985, the amount appropriated has been reduced from \$200 million in FY 1986 to approximately \$87 million in FY 1991. Although the funds have decreased, there was no indication that programs encountered setbacks because requests for Nunn Amendment funds were denied.

Incentives for Cooperation

Personnel in OSD, the Military Departments, and Defense agencies expressed that there was no incentive for DoD program managers to establish cooperative programs. Personnel at those activities most often addressed the lack of high-level OSD support for cooperative programs. For example, there was a lack of guidance on establishing cooperative programs; difficulty in getting guidance beyond the draft phase; an absence of oversight to ensure that cooperative opportunities were explored; and free-

flowing money, making the benefits attainable from cost sharing unnecessary. Additionally, personnel stated that the lengthy approval/disapproval process affected the accomplishment of established program milestones and, thereby, lengthened the time to get a weapon system developed and deployed.

Designation of Primary Office

OSD has not designated a primary office with the responsibility and authority to oversee and promulgate international cooperative programs. Since the issuance of the 1986 OSD memorandum that divided responsibility for establishing RDT&E cooperative programs between two primary OSD elements, several functional reorganizations and consolidations have occurred within OSD. After the reorganizations, guidance specifying which offices were responsible for cooperative programs has not been issued. As a result, 6 major OSD elements with 24 subordinate offices exercise review and approval authority over cooperative programs (see Appendix C). Within the Office of the Under Secretary of Defense for Acquisition, the Deputy Under Secretary of Defense (International Programs) has the authority to serve as the OSD focal point for coordinating cooperative nominations, issuing guidance, and approving MOUs through OSD. As the focal point, the Deputy Under Secretary is prohibited from enforcing time frames for Military Departments to respond to proposed guidance and MOUs. Without an office for central oversight, issuance of guidance and MOUs has been delayed, and the offices that can best assist in developing cooperative programs with U.S. allies have not been effectively used.

Issuing guidance. DoD has not issued the guidance necessary for the establishment and management of cooperative research and development programs. We reviewed three drafts of proposed guidance that, if approved, should eliminate many of the problems program managers encounter when trying to establish cooperative programs. Draft DoD Directive 2000.9, "DoD Participation in International Technical Exchange, Cooperative, and Coproduction Programs," has been under revision by the Defense Security Assistance Agency for more than 2 years. The revision was necessary to expand the existing guidance beyond coproduction to include cooperative research and development. Draft DoD Manual 5134.1-M, "International Cooperative Programs Management Manual," cannot be issued by the Deputy Under Secretary of Defense (International Programs) until DoD Directive 2000.9 is signed. The release of the guidance is being delayed, for example, because the Assistant Secretary of Defense (Program Analysis and Evaluation) wants the publication to require a cost and operational effectiveness analysis for potential cooperative programs. The Assistant Secretary has sought compromise and even modified his position and still no ruling or approval of the directive has been accomplished. Resolution of that issue requires elevation to the Deputy Secretary of Defense. Finally, OSD General Counsel has been revising DoD Directive 5530.3, "International Agreements" for more than 2 years. That Directive

establishes the procedures for negotiating MOUs. General Counsel attributes the delay in issuance to a shortage of personnel. Without current and complete policy and guidance, implementation and management of cooperative programs is difficult.

Approving MOUs. DoD estimates that it takes from 2 1/2 to 3 years to process an MOU. We reviewed 20 cooperative programs but were unable to identify specific problem areas causing processing delays or how long each participant took in the process, because consistent tracking procedures were not established within DoD. Further, a 30-day suspense established for the review of MOUs by the Departments of Commerce and State and the Congress has not been applied to the DoD Departments and offices involved in cooperative programs. Thus, there is no accountability for delays in responding to proposed MOUs. Finally, DoD personnel stated that Departments and offices may comment on issues beyond their areas of responsibility, change prior decisions, and make new recommendations to a previously reviewed MOU.

We acknowledge that although the DoD MOU review process is lengthy, the United States is not totally responsible for the delays. U.S. allies review MOUs to ensure compliance with their established policies and procedures. Nevertheless, DoD has the responsibility to be timely and efficient in processing MOUs.

Identifying offices involved with allies. The DoD maintains an Office of Defense Cooperation (ODC) in the U.S. embassy of each major ally. The ODC fulfills several roles in U.S. foreign policy, including security assistance, defense cooperation, and promotion of industrial cooperation. Personnel assigned to the ODCs have access to the allied Ministries of Defense, laboratories, and contractors, thereby gaining invaluable insight into their technical capabilities and willingness to cooperate at the military level. Although ODC personnel may have the best opportunity to foster and facilitate successful cooperative programs, they are not accountable to the acquisition authority. Rather, the ODCs are responsible to the unified theater commander, such as the European or Pacific Command, which have limited involvement in acquisition or policy decisions affecting defense cooperation and security assistance. The Under Secretary of Defense for Acquisition in his comments to the draft report stated that the issuance of DoD Directive 2000.9 would assure adequate access to the ODCs. Based on the Under Secretary's comments, we deleted draft report Recommendation 1.d. to align the ODCs under the Under Secretary's office.

Compliance with Stated Policy

Defense acquisition regulations (DoD Directive 5000.1 and DoD Instruction 5000.2) require program managers of nonmajor programs to consider international opportunities before initiating a national program. However, our sample of 44 programs showed that all of these DoD program managers were aware of applicable

foreign technologies or allied interest, but 30 percent were not aware of the requirement to consider cooperation as an alternative before starting a national program. The acquisition regulations assign oversight responsibility on major programs to the Deputy Under Secretary of Defense (International Programs), but the responsibility for oversight on nonmajor programs has not been defined. Further, the acquisition regulations do not require research and development activities, such as the Defense Advanced Research Projects Agency and Military Departments' laboratories, to identify and consider cooperative opportunities to meet their requirements. The Data Exchange Agreements utilized by those activities are an excellent source for initiating cooperative programs. Data Exchange Agreements are formal arrangements for sharing information, generally at the basic research level. Cooperative programs can be a follow on to a Data Exchange Agreement. For example, the Air Force cooperative program on the Ducted Rocket resulted from work begun under a Data Exchange Agreement.

Program Benefits

The benefits the DoD misses by not maximizing cooperative programs with its allies include:

- savings in research and development expenditures,
- reduced duplication of development and production within the Alliance, and
- earlier and more frequent deployment of interoperable and standardized systems by allied members.

Additionally, by not cooperating in research and development programs, the United States loses valuable opportunities to improve relations with DoD's strategic military allies.

Lowering research and development costs. The DoD has the potential to achieve significant cost avoidances in research and development through cooperative programs. Shared research and development costs are a benefit U.S. allies have long recognized. Cooperative programs have been used in Europe out of necessity because governments have been unable to fund modern state-of-the-art programs on a national level. U.S. allies use a formula to estimate, for budgetary purposes, the increase in costs for doing a cooperative program. The formula assumes the total cost to do a cooperative program increases by a factor equivalent to the square root of the number of partners. We were unable to determine the formula's origin but noted that it was widely accepted in Europe and cited in articles of defense publications and a February 26, 1991, report issued by the United Kingdom National Audit Office. That office is the counterpart of the U.S. General Accounting Office.

We applied the formula in reverse to 20 DoD cooperative programs (see Appendix D). We calculated the national program cost from which we subtracted actual investment contributions to determine

the cost avoidance DoD could realize on the 20 cooperative programs. DoD should realize a net savings of \$140 million, averaging 11 percent of the total program cost on the 20 cooperative programs. If these programs and averages are representative, then we estimate DoD could save as much as \$10 billion on the 150 programs valued at \$93 billion and projected as having cooperative potential.

Interoperability and standardization. It is the goal of the United States and its allies to field systems that, when jointly deployed, can interface easily and be maintained by common parts and supplies. Cooperative research and development programs help ensure the accomplishment of that goal while affording economic benefits through cost sharing.

Conclusion

The Deputy Secretary of Defense has publicly recognized the benefits from using cooperative programs and acknowledged that such arrangements will not result in the loss of U.S. jobs or technology. However, there are no incentives for program managers to seek cooperative agreements, guidance has not been implemented, and oversight for nonmajor programs does not adequately address the requirement for program managers to consider cooperative partners before initiating national programs. As a result, the United States is missing opportunities to lower the Defense budget and improve interoperability and standardization. We projected that 150 research and development program elements have cooperative potential.

RECOMMENDATIONS FOR CORRECTIVE ACTION

1. We recommend that the Deputy Secretary of Defense:
 - a. Delegate to the Deputy Under Secretary of Defense (International Programs) the authority to resolve conflicts that arise over both the issuance of guidance and the establishment of cooperative programs pertaining to international cooperation.
 - b. Task the Deputy Under Secretary of Defense (International Programs) to develop a plan to streamline Memorandum of Understanding processing procedures.
 - c. Direct applicable offices to expedite the issuance of pending directives on international cooperation.
2. We recommend that the Directors of affected Defense agencies and the Service Acquisition Executives designate one office to review acquisition plans to ensure that adequate consideration has been given to establishing a cooperative program and to report the results to appropriate decisionmakers.

MANAGEMENT COMMENTS AND AUDIT RESPONSES

The Deputy Secretary of Defense deferred comments on the draft report and will comment on the final report.

The Under Secretary of Defense for Acquisition concurred with Recommendations 1.a., 1.b., and 1.c. but nonconcurred with draft Recommendation 1.d., stating the International Programs Office does not have the resources or expertise to administer the consolidation effort. He further stated that the draft Directive for international cooperation provides the proper degree of input from his office, the Director of Defense Security Assistance Agency, and various concerned organizations over the Office of Defense Cooperation activities in these areas.

Audit Response. We consider the Under Secretary's comments to be responsive; however, estimated dates of completion are still needed. The issuance of directives should satisfy the intent of Recommendation 1.d. to improve communications between the Offices of Defense Cooperation and the Deputy Under Secretary of Defense (International Programs); thus we eliminated it.

The Principal Deputy Assistant Secretary of Defense for Program Analysis and Evaluation denied being responsible for the delay in issuing DoD Directive 2000.9, stating his office has sought compromise and even modified its position and to date nothing has helped to break the logjam. The Assistant Secretary also questioned the inference that every project with potential would be a success and the estimation of budget savings before applying an unproven square root rule.

Audit Response. The Assistant Secretary's input to the DoD Directive 2000.9 is an example of how one concern or issue can stop the approval process. Potential projects are ones that have interoperability and standardization potential based on discussions with U.S. program managers and foreign sources and, therefore, are the best candidates to be successes. The square root rule is used in Europe as an analysis tool to determine approximate potential budget savings before entering into a cooperative project. We have not claimed a monetary benefit in this report. We cited the process for illustration.

The Department of the Army did not respond.

The Department of the Navy concurred with the finding and Recommendation 2 in the audit report and is taking steps to establish internal controls to ensure all Department of the Navy program managers fully evaluate the feasibility of establishing cooperative programs.

The Department of the Air Force concurred with Recommendation 2 stating that cooperative opportunities will be pursued through

close interaction with the requirements process, field organizations, and the acquisition programs. Investigation and exploitation of opportunities will be accomplished early in the research and development process.

Defense Security Assistance Agency (DSAA) nonconcurred with Recommendations 1.a., 1.b., 1.c., and 1.d. stating the appropriate level for resolution of conflicts should stay at the Deputy Secretary of Defense. The DSAA stated concern that Deputy Under Secretary of Defense (International Policy) could ignore the legitimate concerns and statutory authority of the Military Departments, Joint Chiefs of Staff, DoD General Counsel, DoD Comptroller, Under Secretary of Defense for (Policy), and even Under Secretary Defense for (Acquisition). Further, DSAA stated that realignment of the Offices of Defense Cooperation under the Deputy Under Secretary of Defense (International Policy) is unnecessary to facilitate international cooperative programs.

Audit Response. The audit identified specific problems that are proliferated by the unwillingness of offices to submit conflicts for resolution to the Deputy Secretary of Defense. Unapproved regulations and timeliness of processing approvals for memorandum of understandings shows the need to delegate one office with approval authority. This procedure would not eliminate the rights to appeal decisions to the Deputy Secretary of Defense.

The Strategic Defense Initiative Organization (SDIO) concurred with the recommendations and stated that SDIO's international activities have without question reduced the cost of weapons systems, gained advanced technologies, and allowed opportunities for interoperability necessary to achieve effective and credible systems for protecting the U.S. and allies from the threat of offensive ballistic missiles.

Defense Advanced Research Projects Agency (DARPA) had no comment on Recommendation 2 but expressed concern that the draft report implied that they were not actively participating in allied cooperative programs when DARPA has had four programs funded from the Nunn Amendment and has successfully undertaken from direct appropriated funds more than 12 other nonmajor programs with U.S. allies. Further, calculation of monetary benefits is difficult to accomplish with any accuracy because our allies also provide in-kind services for which no dollar amounts are identifiable.

Audit Response. The audit showed that DARPA is an exception for research and development agencies in that they actively pursue international cooperative opportunities. The issue that a lack of directives for research and development activities to identify and consider international cooperative opportunities is still valid.

The Defense Information Systems Agency (DISA) partially concurred with Recommendation 2, expressing concern with the effectiveness of one office to cover the Agency, given its size and diversity, but agrees that coordination is needed between the two offices currently designated to oversee international programs. Further, DISA expressed that Defense agencies should be considering more than acquisition plans, such as interoperability issues.

Audit Response. Large and diverse organizations, like DISA, need a single office, as Appendix C of our report graphically shows how size and diversity can impact the processing of memorandums of understanding. Unless one office is designated the authority to resolve issues, the probability of disruption in the approval process multiplies. Further, the Defense acquisition directives include consideration of standardization and interoperability issues during the acquisition process.

Defense Mapping Agency concurred with Recommendation 2 and has designated a primary office to ensure that foreign cooperation is appropriately considered before initiating a U.S. research and development program.

The Defense Nuclear Agency concurred with the finding and Recommendation 2 of the draft audit report.

STATUS OF RECOMMENDATIONS

<u>Number</u>	<u>Addressee</u>	<u>Response Should Cover:</u>			
		<u>Concur / Nonconcur</u>	<u>Proposed Action</u>	<u>Completion Date</u>	<u>Related Issues</u>
1.a.	DEPSECDEF ¹	x	x	x	IC ²
1.b.	DEPSECDEF	x	x	x	IC
1.c.	DEPSECDEF	x	x	x	IC
2.	Directors Defense Agencies Service Acquisition Executives	x	x	x	IC
		x	x	x	IC

¹ DEPSECDEF - Deputy Secretary of Defense

² IC = internal control weakness

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PART III - ADDITIONAL INFORMATION

Appendix A - Policy Governing the Establishment and
Operation of International Cooperative
Research and Development Programs

Appendix B - Statistical Sample Methodology

Appendix C - Activities Involved in International
Cooperative Research and Development

Appendix D - Square Root Formula Application

Appendix E - Summary of Potential Benefits Resulting
from Audit

Appendix F - Activities Visited or Contacted

Appendix G - Report Distribution

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**APPENDIX A - POLICY GOVERNING THE ESTABLISHMENT AND
OPERATION OF INTERNATIONAL COOPERATIVE
RESEARCH AND DEVELOPMENT PROGRAMS**

Some of the policy governing the establishment and operation of international cooperative research and development programs within DoD is discussed below.

Legislation

Nunn Amendment. Public Law 99-145, Section 1103 was passed in November 1985, as part of the FY 1986 Defense Authorization Act, to foster international cooperation between the United States, NATO, and other major allies. It authorized funds to be made available to start international cooperative research and development projects and gave the Secretary of Defense the authority to enter into memorandums of understanding with one or more major allies of the United States to establish the cooperative programs. The provisions authorizing cooperative research and development projects are now codified under U.S.C., title 10, section 2350a.

Cooperative research and development projects: allied countries. U.S.C., title 10, section 2350a authorizes the Secretary of Defense to enter into memorandums of understanding with one or more major allies of the United States for conducting cooperative research and development projects on defense equipment and munitions. It requires the Secretary to determine that a proposed project will improve, through the application of emerging technology, the conventional defense capabilities of NATO or the United States and its major non-NATO Allies.

Defense memorandums of understanding (MOUs) and related agreements. U.S.C., title 10, section 2504 requires the Secretary of Defense to consider the effects of MOUs on the defense industrial base of the United States and to consult with the Secretary of Commerce on potential adverse effects of an international agreement on the industrial base.

Technology transfer. U.S.C., title 10, section 2505 requires the Secretary of Defense to certify that any MOU agreement transferring Defense technology to a foreign country or firm must be in the interests of the United States. Also, it requires the Secretary of Defense to consult with the Secretaries of State and Commerce on the proposed agreement that transfers Defense technology and to determine that the agreement will strengthen the national security of the United States.

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**APPENDIX A - POLICY GOVERNING THE ESTABLISHMENT AND
OPERATION OF INTERNATIONAL COOPERATIVE
RESEARCH AND DEVELOPMENT PROGRAMS** (Continued)

implementing DoD Directive 2000.9 (in draft form as of the time of the audit). Since the Manual will be authorized by proposed DoD Directive 2000.9, it is pending approval, along with Directive.

DoD Directive 5530.3, "International Agreements," June 11, 1987, is being revised by the DoD Office of General Counsel. This Directive prescribes procedures and assigns responsibilities for the formulation and approval of international agreements involving DoD.

Policy Memorandums

Secretary of Defense Memorandum, "Emphasis on NATO Armaments Cooperation," dated June 6, 1985, stresses the importance of United States' cooperation with NATO in arms development. The Secretary requests that the Services thoroughly explore cooperative joint research, particularly in cases when common operational and design requirements can be established; mission effectiveness would be maintained at an acceptable level; technology sharing, on a bilateral basis would provide near-equal benefits to cooperating nations; economies of scale and/or avoidance of duplicative costs are possible; and standardization and interoperability of NATO forces and equipment would be enhanced.

Secretary of Defense Memorandum, "NATO Cooperative Projects," dated January 28, 1986, explains recently enacted legislation affecting international armaments cooperative projects. The Memorandum assigns responsibilities to the Under Secretaries for identifying candidate cooperative projects and for promulgating policies and procedures for implementing cooperative projects. The memorandum repeats the commitment of the DoD to attain adequate Alliance conventional capabilities by pursuing armaments cooperative initiatives.

APPENDIX B - STATISTICAL SAMPLE METHODOLOGY

Audit methodology included a stratified, random, sample of research and development projects budgeted from FY 1992 to FY 1997. To establish a universe of programs, we obtained RDT&E appropriation data by program element as contained in the Comptroller of the Department of Defense 1991 Program Objective Memorandum. We eliminated program elements that were less than \$100 million and managed by the National Security Agency and those funding operations at research and development facilities. Our sample universe consisted of 318 program elements, valued at \$204 billion. The universe was then stratified based on Military Department and Defense agency dollar value.

We designed a sample, assuming a 50 percent rate of occurrence and a confidence interval of (+ or -) 10 percent at a 90 percent confidence level. From the universe of the 318 programs, our sample consisted of 63 programs. However, of the 63 programs, we eliminated programs with special access requirements because the time required to gain access to the programs would have been prohibitive. Also, we eliminated programs funding the operation and maintenance of DoD laboratories. In total, we excluded 19 programs, reaching a sample of 44 programs on which we based projections.

The sample determined 3 programs were cooperative, 27 had potential to be cooperative, and 14 had no potential. Programs determined to have potential for cooperation had to meet all of the following criteria:

- program had to have sufficient development effort remaining to permit cooperation;
- program could not involve any security issues;
- program could not involve any national policy issues;
- program had known allied interest; and
- ally must have some technical capability.

The 27 programs we identified as having met the criteria for having the potential for cooperation are listed below.

<u>Defense Agency Programs</u>	<u>Value</u>
Balanced Technology Initiative	\$1,165,841
Microwave and Millimeter Wave Analog	
Integrated Circuits	591,250
Strategic Technology	800,000
Follow-on Systems	6,533,548
Worldwide Command, Control System	263,237
Shock Effects	281,645
Joint Robotics Program	124,680
Total	<u>\$9,760,201</u>

APPENDIX B - STATISTICAL SAMPLE METHODOLOGY

(Continued)

Army Programs

	Value
Block III Tank	\$1,781,772
LH-X Helicopter	2,290,387
Line of Sight Anti-Tank Weapon	683,470
Combat Mobility Vehicle	592,393
Advanced Field Artillery System	164,076
Weapons and Munitions Technology	<u>117,288</u>
Total	<u>\$5,629,386</u>

Navy Programs

	Value
Advanced Tactical Fighter	\$2,055,900
Defense Research Sciences	2,673,680
Trident Submarine	556,500
Anti-Air Warfare/Anti-Surface Warfare	505,526
Aircraft Technology	174,300
PHALANX Missile	139,830
Satellite Communications System	251,419
Light Airborne Multi-Purpose system	<u>240,600</u>
Total	<u>\$6,597,755</u>

Air Force Programs

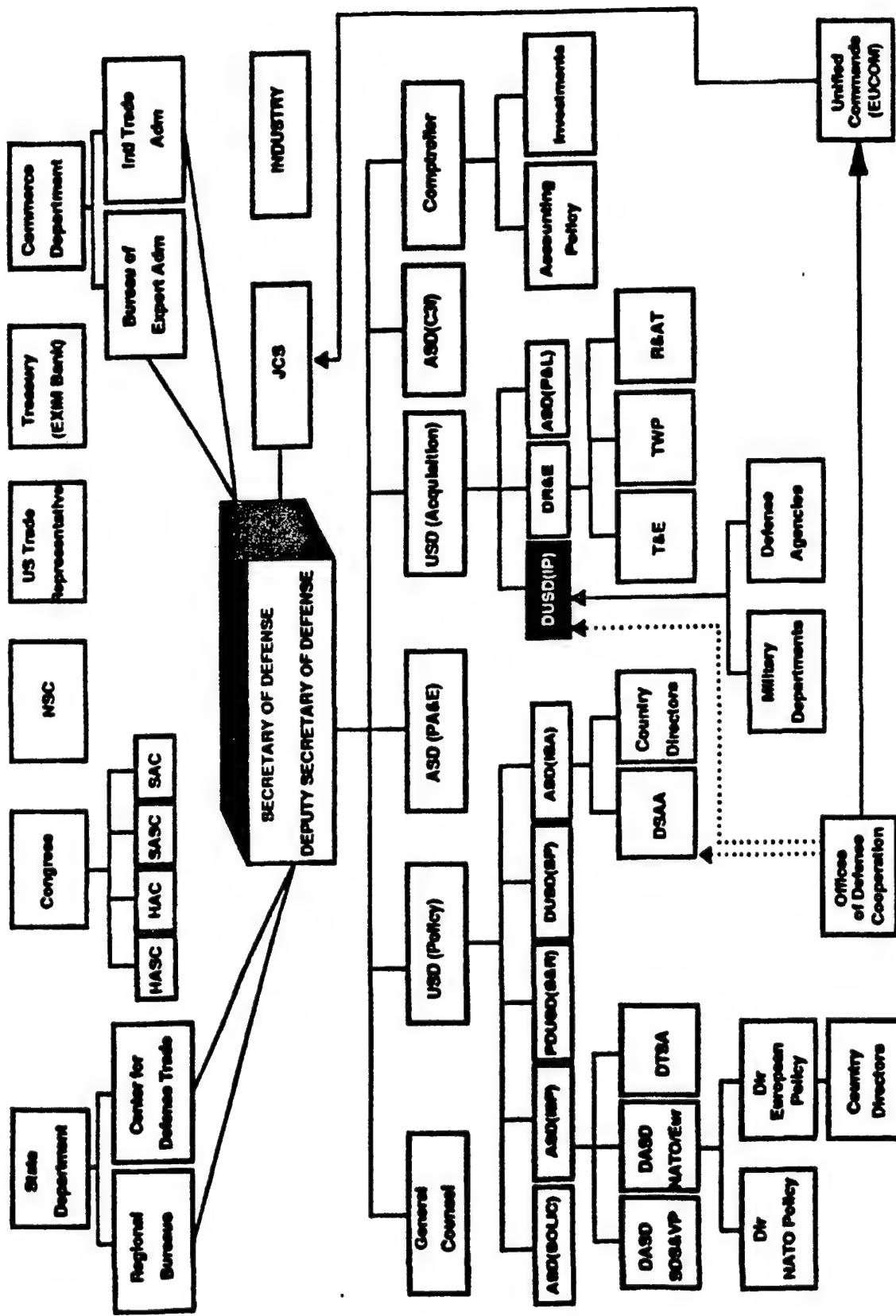
	Value
Advanced Tactical Fighter	\$11,157,698
Small Inter-Continental Ballistic Missile	2,352,188
Advanced Launch System	730,851
Defense Satellite Communication System	849,373
Defense Research Sciences	171,563
Reliability and Maintainability	
Technology Insertion Program	<u>161,530</u>
Total	<u>\$15,423,203</u>

Grand Total

\$37,410,545

Programs determined to have no potential were categorized as follows: 11 involved security policies, 2 pertained to facilities' operational support, and had 1 insufficient development effort remaining. Based on the sample, we projected that 150 programs, with a value of \$93 billion, have the potential to be cooperative.

APPENDIX C - ACTIVITIES INVOLVED IN INTERNATIONAL COOPERATIVE RESEARCH AND DEVELOPMENT



* See legend on next page.

**APPENDIX C - ACTIVITIES INVOLVED IN INTERNATIONAL
COOPERATIVE RESEARCH AND DEVELOPMENT**
(Continued)

Legend:

<u>Acronym</u>	<u>Activity</u>
ASD(C3I)	Assistant Secretary of Defense (Command, Control, Communications and Intelligence)
ASD(ISA)	Assistant Secretary of Defense (International Security Affairs)
ASD(ISP)	Assistant Secretary of Defense (International Security Policy)
ASD(PA&E)	Assistant Secretary of Defense (Program Analysis and Evaluation)
ASD(P&L)	Assistant Secretary of Defense (Production and Logistics)
ASD(SOLIC)	Assistant Secretary of Defense (Special Operations and Low Intensity Conflict)
DASD(NATO/EUR)	Deputy Assistant Secretary of Defense (North Atlantic Treaty Organization Europe)
DASD(SDS&VP)	Deputy Assistant Secretary of Defense (Strategic Defense and Verification Policy)
DDR&E	Director Defense Research and Engineering
DSAA	Defense Security Assistance Agency
DTSA	Defense Technology Security Administration
DUSD(IP)	Deputy Under Secretary of Defense (International Programs)
DUSD(SP)	Deputy Under Secretary of Defense for Security Policy
EXIM Bank	Export Import Bank
EUCOM	European Command
HAC	House Appropriations Committee
HASC	House Armed Services Committee
JCS	Joint Chiefs of Staff
NSC	National Security Council
PDUSD(S&R)	Principal Deputy Under Secretary (Strategy and Resources)
R&AT	Research and Advanced Technology
SAC	Senate Appropriations Committee
SASC	Senate Armed Services Committee
T&E	Test and Evaluation
TWP	Tactical Warfare Program
USD(Acquisition)	Under Secretary of Defense for Acquisition
USD (Policy)	Under Secretary of Defense for Policy

APPENDIX D- SQUARE ROOT FORMULA APPLICATION

For 20 cooperative programs nominated by the Military Departments, we applied the reverse application of the theory that the total costs for cooperative programs are higher than for national programs by a factor equal to the square root of the number of partners involved. Using the theory, we determined the potential for savings in potential cooperative programs. The cost figures below were derived from the Fiscal Memorandums and MOUs for cooperative programs. All monetary amounts are in millions.

Programs ¹	No. of Ptners	U.S.		Allied		Total Cost	Root Factor	Nat'l Cost ²	Saving/ Loss ³
		Cost	Cost	Cost	Cost				
CLDS	2	\$ 14.63	\$ 4.83	\$ 19.46	1.40	\$ 13.90	\$ <.73>		
IIR	2	7.24	3.00	10.24	1.40	7.31	.07		
SC	2	12.00	12.00	24.00	1.40	17.14	5.14		
AAA	2	14.30	5.00	19.30	1.40	13.79	<.51>		
MA	2	5.00	5.00	10.00	1.40	7.14	2.14		
CLADARM	2	6.00	1.76	7.76	1.40	5.54	<.46>		
AAPS	2	16.52	14.00	30.52	1.40	21.80	5.28		
R-ARM	2	6.90	19.20	26.10	1.40	18.64	11.74		
EM-GUN	2	10.00	14.30	24.30	1.40	17.36	7.36		
SSTD	2	109.80	109.80	219.60	1.40	156.86	47.06		
DR-1	2	2.20	2.20	4.40	1.40	3.14	.94		
DR-2	2	2.20	2.20	4.40	1.40	3.14	.94		
PALADIN	2	174.50	27.18	201.68	1.40	144.06	<30.44>		
FTMA	4	67.10	100.40	167.50	2.00	83.75	16.65		
MIDS	5	181.29	313.88	495.17	2.24	221.06	39.77		
MAD	5	7.40	9.00	16.40	2.24	7.32	<.08>		
NILE	7	1.22	7.38	8.60	2.65	3.25	2.03		
TGW	4	<u>222.60</u>	<u>334.40</u>	<u>557.00</u>	2.00	<u>278.50</u>	<u>55.90</u>		
Total		\$861.10	\$985.33	\$1,846.43		\$1,013.70	\$162.60		
Canceled	Programs								
NAAWS	6	16.45	18.55	35.00	2.45	14.29	<2.16>		
APGM	8	<u>221.00</u>	<u>348.60</u>	<u>569.60</u>	2.83	<u>201.27</u>	<u><19.73></u>		
Total		\$237.45	\$367.15	\$604.60		\$215.56	<\$21.89>		
Grand Total		<u>\$1,098.55</u>	<u>\$1,352.48</u>	<u>\$2,451.03</u>		<u>\$1,229.26</u>	<u>\$140.71</u>		

National Cost	\$1239.26	100 percent
U.S. Contribution	<\$1098.35>	89 percent
Cooperative Savings	\$ 140.71	11 percent

¹ See legend on next page.

² National Costs = Total Cost divided by Square Root Factor.

³ Saving/Loss = National Cost minus U.S. Cost

APPENDIX D - SQUARE ROOT FORMULA APPLICATION (Continued)

Assuming the 20 cooperative programs fairly represent the percentage of the number of partners and costs of a national program and that cooperative programs meet their MOU objectives, we estimated that approximately 11 percent of the inflated cooperative cost (national cost) can be saved on the square root theory. By applying this assumption further, the potential cooperative programs, valued at \$93 billion identified in Appendix B, could conservatively total \$10.23 billion (11 percent), in savings from cooperative efforts.

Legend:

<u>Acronym</u>	<u>Program Name</u>
CLDS	Close Loop Degausing System
IIR	Image/Information Reformatter
SC	Super Cockpit Program
AAA	Advanced Avionics Architecture
MA	Modular Avionics
CLADARM	Defeat of Explosive Clad Armor by Non-Reactive Means
AAPS	Advanced Armor Protection System
R-ARM	Reactive Armor
EM-GUN	Electro-Magnetic Gun
SSTD	Surface Ship Torpedo Defense
DR-1	Ducted Rocket Program One
DR-2	Ducted Rocket Program Two
PALADIN	PALADIN Cannon
FTMA	Future Tank Main Armament
MIDS	Multifunction Information Distribution System
MAD	Magnetic Anomaly Detector
NILE	NATO Improved Link Eleven
NAAWS	NATO Anti-Air Warfare System
MLRS-TGW	Multiple Launch Rocket System-Terminally Guided Warhead
APGM	Autonomous Precision Guided Munition

APPENDIX E - SUMMARY OF POTENTIAL BENEFITS RESULTING FROM
AUDIT

<u>Recommendation Reference</u>	<u>Description of Benefits</u>	<u>Amount and/or Type of Benefit</u>
1.a.	Internal Controls. Designate one office with the responsibility to issue guidance.	Nonmonetary
1.b.	Internal Controls. Streamline the Memorandum of Understanding processing procedures.	Nonmonetary
1.c.	Internal Controls. Expedite the issuance of pending directives on international cooperation.	Nonmonetary
2.	Internal Controls. Ensure that adequate consideration has been given to establishing cooperative programs and to report results to appropriate decision- makers.	Nonmonetary

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APPENDIX F - ACTIVITIES VISITED OR CONTACTED

Office of the Secretary of Defense

Assistant Secretary of Defense (Production and Logistics),
Washington, DC
Deputy Under Secretary of Defense for Acquisition
(International Programs), Washington, DC
Deputy Under Secretary for Security Policy, Washington, DC

Department of the Army

Assistant Secretary of the Army (Research, Development and
Acquisition), Washington, DC
Deputy Chief of Staff for Intelligence, Washington, DC
Deputy Chief of Staff for Operations and Plans,
Washington, DC
Army Aviation Systems Command, St. Louis, MO
Army Materiel Command, Aberdeen, MD
International Programs Office
Army Missile Command, Redstone Arsenal, AL
Chemical, Research, Development and Engineering Center,
Aberdeen, MD
Communications Electronic Command, Fort Monmouth, NJ
Strategic Defense Command, Redstone Arsenal, AL
Tank-Automotive Command, Warren, MI
Army Chemical School, Fort McClellan, AL

Department of the Navy

Chief of Naval Operations, Washington, DC
Assistant Chief of Naval Operations (Air Warfare),
Washington, DC
Assistant Chief of Naval Operations (Surface Warfare),
Washington, DC
Deputy Assistant Secretary of the Navy (International
Policy)
Director of Navy Requirements for Research and Development,
Test and Evaluation, Washington, DC
Naval Air Systems Command, Washington, DC
Naval Sea Systems Command, Washington, DC
Naval Space and Warfare Systems Command, Washington, DC
Naval Investigative Service, Washington, DC
Navy International Programs Office, Washington, DC

APPENDIX F - ACTIVITIES VISITED OR CONTACTED (Continued)

Department of the Air Force

Deputy Assistant Secretary of the Air Force (Acquisition Management and Policy), Washington, DC
Air Force Materiel Command, Andrews Air Force Base, MD
Aeronautical Systems Division, Wright-Patterson Air Force Base, OH
Space Systems Division, Los Angeles Air Force Base, CA
Ballistic Missile Organization, Norton Air Force Base, CA

Defense Agencies

Defense Advanced Research Projects Agency
Defense Communications Agency
Defense Mapping Agency
Defense Nuclear Agency
Strategic Defense Initiative Organization

Other DoD Activities

Headquarters, European Command
Defense Cooperation Armaments Office, U.S. Embassy, London, United Kingdom
Office of Defense Cooperation, U.S. Embassy, Bonn, Germany
Office of Defense Cooperation, U.S. Embassy, Paris, France
Office of Defense Cooperation, U.S. Embassy, Rome, Italy

Non-DoD Organizations

U.S. Ambassador, North Atlantic Treaty Organization
Brussels, Belgium
General Accounting Office, Washington, DC

Non-Government Activities

Embassy of Great Britain, Washington, DC
Embassy of Germany, Washington, DC
Embassy of France, Washington, DC
Embassy of Italy, Washington, DC
Ministry of Defense, London, United Kingdom
Ministry of Defense, Bonn, Germany
Delegue General Pour L'Armement, Paris, France
Ministry of Defense, Rome, Italy
Alenia Corporation, Rome, Italy

APPENDIX G - REPORT DISTRIBUTION

Office of the Secretary of Defense

Under Secretary of Defense for Acquisition
Director, Test and Evaluation
Director, Tactical Warfare Programs
Deputy Under Secretary of Defense (International Programs)
Under Secretary of Defense for Policy
Assistant Secretary of Defense (International Security Affairs)
Deputy Under Secretary for Security Policy
Assistant Secretary of Defense (Program Analysis and Evaluation)
Comptroller of the Department of Defense

Department of the Army

Secretary of the Army
Assistant Secretary of the Army (Financial Management)
Assistant Secretary of the Army (Research, Development and Acquisition)
Inspector General, Department of the Army
Headquarters, Army Materiel Command

Department of the Navy

Secretary of the Navy
Assistant Secretary of the Navy (Financial Management)
Assistant Secretary of the Navy (Research, Development and Acquisition)
Deputy Assistant Secretary of the Navy (International Policy)
Comptroller of the Navy
Naval Air Systems Command
Naval Sea Systems Command
Space and Naval Warfare Systems Command
Chief of Naval Research
Navy International Programs Office

Department of the Air Force

Secretary of the Air Force
Assistant Secretary of the Air Force (Acquisition)
Headquarters, Air Force Materiel Command
Aeronautical Systems Division
Space Systems Division

APPENDIX G - REPORT DISTRIBUTION (Continued)

Defense Agencies

Defense Advanced Research Projects Agency
Defense Communications Agency
Defense Mapping Agency
Defense Nuclear Agency
Strategic Defense Initiative Organization

Other DoD Activities

Headquarters, European Command
Defense Cooperation Armaments Office, U.S. Embassy,
London, United Kingdom
Office of Defense Cooperation, U.S. Embassy, Bonn, Germany
Office of Defense Cooperation, U.S. Embassy, Paris, France
Office of Defense Cooperation, U.S. Embassy, Rome, Italy

Non-DoD Organizations

U.S. Ambassador, North Atlantic Treaty Organization

Non-DoD Government Activities

Office of Management and Budget
U.S. General Accounting Office, NSIAD Technical Information
Center

Congressional Committees:

Senate Subcommittee on Defense, Committee on
Appropriations
Senate Committee on Armed Services
Senate Committee on Governmental Affairs
Ranking Minority Member, Senate Committee on
Appropriations
House Committee on Appropriations
House Subcommittee on Defense, Committee on Appropriations
Ranking Minority Member, House Committee on Appropriations
House Committee on Armed Services
House Committee on Government Operations
House Subcommittee on Legislation and National Security,
Committee on Government Operations

PART IV - MANAGEMENT COMMENTS

Office of the Under Secretary of Defense for Acquisition
Office of the Assistant Secretary of Defense for Program
Analysis and Evaluation
Department of the Navy
Department of the Air Force
Defense Security Assistance Agency
Strategic Defense Initiative Organization
Defense Advanced Research Projects Agency
Defense Information Systems Agency
Defense Mapping Agency
Defense Nuclear Agency

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The Under Secretary of Defense for Acquisition Comments

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THE UNDER SECRETARY OF DEFENSE
WASHINGTON, DC 20301

August 7, 1992

MEMORANDUM FOR DIRECTOR, ACQUISITION MANAGEMENT DIRECTORATE,
INSPECTOR GENERAL

SUBJECT: Draft Audit Report on the Audit of International
Cooperative Research and Development (Project No.
1AB-0055)

This memorandum provides comments on those portions of the "Draft Report on the Audit of International Cooperative Research and Development, Project No. 1AB-0055", which are addressed to the Office of the Secretary of Defense. The comments address each recommendation number (1.a) to (1.d) in turn, along with its associated findings, as well as the alleged material internal control weakness.

10, para 2

Recommendation 1a: Delegate to the Deputy Under Secretary (International Programs) the authority to resolve conflicts that arise over both the issuance of guidance and the establishment of cooperative programs pertaining to International Cooperation.

Associated Finding: OSD has not designated a primary office with the responsibility and authority to oversee and promulgate international cooperative programs.

We concur with the finding but believe that draft DoDD 2000.9, which is now awaiting signature of DepSecDef, includes an appropriate assignment of responsibilities which will resolve the IG's concerns. We have no basis on which to estimate the monetary benefits which may result.

10, para 2

Recommendation 1b: Task the Deputy Under Secretary (International Programs) to develop a plan to streamline Memorandum of Understanding processing procedures.

Associated Finding: DoD estimates that it takes from 2-1/2 to 3 years to process an MOU.

We concur.

To this end, the Department's International Programs Committee, chaired by the DUSD(IP) and including representatives from the

The Under Secretary of Defense for Acquisition Comments (continued)

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Military Departments, Defense Agencies, and major OSD Components, has undertaken to streamline this process.

Over the past several months, a DoD-wide working group has taken a Navy model and arrived at a DoD "MOU Generator" which streamlines the complex MOU drafting process by providing a "cookbook" of standard-language MOU provisions.

In addition, the DUSD(IP) is studying the MOU process in detail and evaluating a number of options for streamlining it, including increased delegation of less-significant MOUs and intensive management of more-significant MOUs; this review is expected to be completed within a few months.

In sum, these efforts are expected to significantly reduce the US Government time required to process an MOU. As the report notes, the US is not totally responsible for the delays.

It is too early in the streamlining effort to estimate the monetary benefits which will result.

10, para 2

Recommendation 1c: Direct applicable offices to expedite the issuance of pending directives on international cooperation.

Associated Finding: DoD has not issued the guidance necessary for the establishment and management of cooperative research and development programs...Without current and complete policy and guidance, implementation and management of cooperative programs is difficult.

We concur with the finding and believe that draft DoDD 2000.9, which is now awaiting signature of DepSecDef, along with the publishing of an accompanying draft DoD Manual 5134.1-M 90 days following issue of the Directive, will resolve the IG's concerns. The issuance of the referenced Manual should result in some time (and therefore cost) savings on the part of potential users in DoD components, but we are unable to quantify those benefits *a priori*.

10, para 2

Recommendation 1d: Realign the Offices of Defense Cooperation under the Deputy Under Secretary (International Programs) to better foster and facilitate international cooperation.

Associated Finding: Although Office of Defense Cooperation (ODC) personnel may have the best opportunity to foster and facilitate successful cooperative programs, they are not accountable to the acquisition authority.

We nonconcur.

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3

The Offices of Defense Cooperation (ODCs), located in U.S. embassies abroad, are typically combined with the Security Assistance Offices (SAOs), and with increasing frequency are also combined with the Defense Attache Offices (DAOs). Even though for bookkeeping purposes, separate positions may be designated for Armaments Cooperation, in practice this duty typically is shared by many people. Moreover, as distinct from the Theater Commanders and the Defense Security Assistance Agency (DSAA), which have personnel and administrative sections, the DUSD(IP) does not have the resources nor expertise to administer this program.

Both the DUSD(IP) and the Director, DSAA need to have input and influence over the embassy activities in these areas. We believe the procedures spelled out in the draft Directive on international cooperative programs (discussed above) provide the proper degree of input from the various concerned organizations.

Although we are unable to quantify the monetary benefits associated with this recommendation, we believe they would be negative (that is, result in higher costs) should this recommendation be implemented.

Material Internal Control Weakness: Controls were not effective to ensure that international cooperative research and development programs were properly considered.

Without necessarily agreeing that a material internal control weakness exists, we believe that draft DoDD 2000.9, which is now awaiting signature of DepSecDef, will resolve the IG's concerns in this respect.



Don Yockey

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Office of the Assistant Secretary of Defense for Program Analysis and Evaluation Comments

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PROGRAM ANALYSIS
AND EVALUATION

OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE WASHINGTON, D. C. 20301-1800

August 10, 1992

MEMORANDUM FOR THE ASSISTANT INSPECTOR GENERAL FOR AUDITING, DoD

SUBJECT: Draft Audit Report on International Cooperative Research and
Development

Bob -

Thank you for the opportunity to review the draft report. In my view, the report correctly identifies a number of obstacles to more aggressive implementation of the Department's policy supporting international arms cooperation, including dispersal of authority and breakdowns in oversight and guidance. As my staff indicated to your investigators during their interview, we are inclined to agree that there is potential for a great deal more international cooperation than the Department has pursued to date.

For the reasons outlined in the attachment, however, I believe the report fails to identify and propose remedies for the most important problems underlying the cooperative arms process, and draws attention to peripheral issues. Specifically, the section of the report describing the preparation of DoD Directive 2000.9 misrepresents PA&E's role, and should be revised. Additionally, the discussion of "potential" cooperative projects draws on estimates of budgetary savings that are difficult to substantiate analytically. I recommend that this section of the report be deleted. Finally, the report does not address key questions that may be inferred from its statement of objective. To prevent any misunderstanding by the report's readers, I suggest a disclaimer be added to the statement of objective.

I also suggest that you undertake a follow-on effort that would address the questions fundamental to increased armaments cooperation. I would appreciate the opportunity both to expand on my comments and to work with you in a follow-on effort.

Mike
Michael Leonard
Principal Deputy

Attachment

**Office of the Assistant Secretary of Defense for Program Analysis
and Evaluation Comments (continued)**

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**Detailed PA&E Staff Comments on Draft IG Report
on International Cooperative R&D**

7, para 2

PA&E's Role in Developing DoD Directive 2000.9. The draft report misrepresents the facts with regard to the role of this office in the development of new guidance (DoD Directive 2000.9). Specifically, the report claims that the release of DoDD 2000.9 has been delayed by PA&E's proposal to modify the process by which candidate programs for international cooperation are identified. Since our initial input to OUSD(P) in February 1991, we have taken several steps to resolve the issues we raised, either seeking compromise or encouraging the involvement of senior decisionmakers. These actions include a June 1991 proposal modifying our position, and two meetings between the ASD(PA&E) and Policy and Acquisition representatives. To date, nothing has helped to break the logjam. As of this writing, editorial and technical snags continue to prevent the elevation of this package to the Deputy Secretary for resolution.

Although the companion DoD Manual 5134.1 and the related DoD Directive 5530.3 are not yet as far along in the staffing process, they, too, have suffered extended delays for many of the same reasons.

We strongly recommend that the record be corrected on this point. PA&E is not responsible for delays in issuance of guidance dealing with arms cooperation, and the report's discussion of this topic should be revised accordingly.

6, para 2

Estimates of Savings Relating to Arms Cooperation. We question whether defense research and development projects--with all their programmatic peculiarities and technical complexities--lend themselves to simple statistical extrapolation. In addition, even if one accepts the report's criteria (and their application) to determine projects with "potential" for arms cooperation, we question the inference that *every project* with "potential" would in fact be a success. Finally, the report arrives at estimates of budget savings to be gained from increased arms cooperation by applying an unproven "square root rule."

We believe that the inclusion of such estimates in the report is misleading and inappropriate. Accordingly, we strongly urge that the discussion of "potential" cooperative projects and associated savings be eliminated from the draft report.

Key Questions Not Addressed in the Report. The draft report concludes that more international arms cooperation should and could be achieved--but fails to ask whether those projects that are being undertaken cooperatively are providing benefits exceeding their costs. Specifically, the report does not address such questions as:

- o How successful has the Department been in identifying and completing collaborative projects that reduce duplicative effort and promote equipment interoperability among allies?

**Office of the Assistant Secretary of Defense for Program Analysis
and Evaluation Comments (continued)**

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- o Why have the majority of Nunn-funded programs been "nonmajor" in scope? What is it about the selection process that would explain why, of those projects receiving Nunn-amendment funding, barely half are continued by the services?

The unfortunate fact is that we have not developed a method to judge whether or not arms cooperation has been effective. The draft report does not highlight this fact.

The report also does not discuss the specifics of PA&E proposals, offered during the preparation of DoDD 2000.9, for increasing the discipline of the system. In addition to asking the questions noted above, we have proposed some procedural changes to mitigate the MOU delays mentioned in the report.

Finally, to put the report's statement of objective in clearer perspective, we propose that a disclaimer be added stating that the report does not examine how the Department identifies and selects candidates for cooperation, and that it does not investigate what benefits, if any, the Department has derived from previous arms cooperation.

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The Assistant Secretary of the Navy for Research, Development and Acquisition Comments

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THE ASSISTANT SECRETARY OF THE NAVY
(Research, Development and Acquisition)
WASHINGTON, D.C. 20350-1000

AUG 04 1992

For Official Use Only

MEMORANDUM FOR THE DEPARTMENT OF DEFENSE INSPECTOR GENERAL

Subj: DRAFT AUDIT REPORT ON THE AUDIT OF INTERNATIONAL
COOPERATIVE RESEARCH AND DEVELOPMENT (PROJECT NO.
IAB-0055)

Ref: (a) DOD IG memo of 6 May 92

I concur with many of the findings and recommendations
contained in the subject audit, but wish to highlight the
following points that deserve additional emphasis in the final
report:

7, para 3

a. The Memorandum of Understanding process should be
streamlined through additional delegation of authority to Service
Acquisition Executives for Acquisition Category II-IV programs.

7, para 3

b. Revisions to key DOD Directives, such as DOD Directive
2000.9 (DOD Participation in International Technical Exchange,
Cooperative, and Coproduction Programs), should reflect long
standing Military Department concerns (see Attachment A).

3, para 3

You should also note that the Department of the Navy (DON)
is taking steps to establish internal controls to ensure all DON
program managers fully evaluate the feasibility of establishing
cooperative programs. Our DOD 5000 series acquisition policy
implementing instruction draft, SECNAVINST 5000.2A
(Implementation of Defense Acquisition Management Policies,
Procedures, Documentation, and Reports), includes such controls.

Other detailed comments and technical corrections that we
recommend be incorporated into the draft report are also
contained in Attachment B.

Gerald A. Cann

Attachments

A - ASN (RD&A) memo of 11 Apr 91

B - Detailed Comments and Technical Corrections

Copy to:

NAVNSGEN

NAVCOMPT (NCB-53)

The Assistant Secretary of the Navy for Research, Development
and Acquisition Comments (continued)

Final Report
Reference
Page No.



THE ASSISTANT SECRETARY OF THE NAVY
(Research, Development and Acquisition)
WASHINGTON, D.C. 20350-1000

APR 11 1991

MEMORANDUM FOR UNDER SECRETARY OF DEFENSE (POLICY)

Subj: REISSUANCE OF DOD DIRECTIVE 2000.9 (DOD PARTICIPATION IN
INTERNATIONAL TECHNICAL EXCHANGE, COOPERATIVE, AND
COPRODUCTION PROGRAMS)

Ref: (a) DOD Directive Coordination Route Sheet of 12 Dec 90
(b) ASN (RD&A) memo of 30 Apr 90
(c) ASN (RD&A) memo of 8 Jan 91

The Department of the Navy (DON) concurs with your proposed reissuance of DOD Directive 2000.9 (reference (a) applies), subject to incorporation of the attached Navy comments. We applaud your initiative to reissue the directive, which is significantly outdated, but wish to emphasize the importance of ensuring consistency between this directive, the proposed revisions to DOD Directive 5530.3 (International Agreements), and the yet to be issued DOD 5134.1M (International Cooperative Programs Management Manual). Application of a coherent international program philosophy throughout those policy documents will greatly assist DOD Components responsible for formulating and implementing international programs.

DON has consistently recommended delegation of international agreement authority to DOD Components for non-DAB level cooperative and coproduction programs in order to streamline the international programs process (references (b) and (c) apply). We understand that OSD coordination of the subject directive has resulted in a proposal for case-by-case OSD review of technical exchange agreement annexes prior to their conclusion. Authority to negotiate and conclude such annexes currently resides with the Military Departments. Another OSD coordination proposal would involve DAB review of every proposed international agreement, regardless of program value, to include OSD level review of Military Department project cost/benefit analyses.

We believe that those two OSD proposals are diametrically opposed to DOD's stated policy on acquisition streamlining. DON currently has over thirty anticipated and in-process cooperative and coproduction international agreements, and over four hundred existing technical exchange agreement annexes. OSD's present policy of case-by-case review of the provisions of every international cooperative and coproduction agreement has hampered the effectiveness of the DON's international programs, particularly on smaller, "low visibility" projects. Adoption of the OSD proposals would greatly exacerbate the existing

Attachment A - Comments on Proposed DOD Directive 2000.9

The Assistant Secretary of the Navy for Research, Development
and Acquisition Comments (continued)

Final Report
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Page No.

situation, ultimately resulting in fewer, less effective international programs. Accordingly, we strongly recommend against the incorporation of the proposals into the coordination draft of DOD Directive 2000.9.

If you wish to discuss these comments in further detail, please call me.



Gerald A. Cann

Copy to:
USD(A)
DOD OGC
DSAA
DASN (IP)
Navy IPO (00)
OGC
CNO (OP-06)
Navy JAG

The Assistant Secretary of the Navy for Research, Development
and Acquisition Comments (continued)

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DON COMMENTS ON PROPOSED DOD DIRECTIVE 2000.9

Paragraph A.2.(e) (p.2): Recommend deletion of subparagraph.

Rationale: The proposed signatory (SECDEF) does not need the concurrence of his subordinates to amend/reissue this directive.

Paragraph D.5.(c) (p.4): Recommend deletion of word "Published".

Rationale: There is no requirement for publishing DOD disclosure policies in NDP-1 or other related DOD Directives pertaining to this area.

Paragraph D.5.(c)(3) (new) (p.4): Recommend addition of following subparagraph:

"(3) Applicable DOD Component disclosure policies."

Rationale: Most of the detailed disclosure policy development, review, and approval required for implementation of international programs is performed by DOD Components (primarily the Military Departments).

Paragraph D.8 (p.5): Recommend addition of "personnel attached to or employed by" in front of the words "Department of Defense" in the second line.

Rationale: The prohibition should be issued as guidance to DOD personnel.

Paragraph F.7.a. (p.9): Recommend revising existing paragraph to read as follows (changes shown in bold):

"Under 22 USC 2767(a)(1), reducing or waiving, if other participants agree to do likewise, certain charges that would otherwise be considered appropriate in connection with related sales of U.S. defense articles or services as part of the cooperative project."

Rationale: Clarity.

Paragraph F.8.e.(p.10): Recommend revising existing subparagraph to read as follows (changes shown in bold):

"Not incur U.S. financial obligations in cooperative programs in advance or in excess of available appropriations."

Rationale: More closely parallels Anti-Deficiency Act language.

Attachment A

The Assistant Secretary of the Navy for Research, Development
and Acquisition Comments (continued)

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Page No.

Paragraph H.2.b.(3) (p.12): Recommend inserting the phrase ", or delegating such authority to the appropriate DOD Component" after the words "international agreements" in the second line.

Rationale: Reflects customary USD(A) practice of delegation of such authority to cognizant DOD Component per DOD Directive 5530.3.

Paragraph H.4.a.(1) (p.14): Recommend revising the end of the existing subparagraph to read as follows (changes shown in bold):

". . . and which is financed by either foreign national funding, security assistance funding, or a combination thereof."

Rationale: Clarity.

Paragraph H.4.a.(2) (p.14): Recommend inserting the words "via security assistance" after the words "equipment or services" in the first line.

Rationale: Clarity.

Paragraph H.4.c.(2) (p.14): Recommend inserting the phrase ", or delegation of such authority to the appropriate DOD Component," after the words "international agreements" in the second line.

Rationale: Reflects customary DSAA practice of delegation of such authority to cognizant DOD Component per DOD Directive 5530.3.

Paragraph H.5.e. (p.16): Recommend deletion of existing paragraph and replacement with the following:

"Ensure all proposed international technical exchange, cooperative and coproduction programs complete required disclosure review and approval procedures prior to any foreign offers in accordance with paragraph D.5. above."

Rationale: Reflects customary DOD Component practice of reviewing and approving disclosure guidance for proposed international programs under the authority delegated to DOD Components prior to initiation of technical discussions with foreign governments or organizations.

The Assistant Secretary of the Navy for Research, Development
and Acquisition Comments (continued)

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Page No.

Detailed Comments and Technical Corrections

**DOD IG Draft Report on the Audit of International
Cooperative R&D (Project No. IAB-0055)**

Page 7: Issue: The statements, "GAO recommended that DOD and Navy issue instructions and establish sufficient internal controls to ensure program funding control. The DoD and Navy concurred but have not yet implemented the recommendation." are incorrect regarding Navy.

Recommendation: Navy IPO issued an Internal Policy Directive (IPD 89-27) on 14 December 1989 to implement the Navy internal controls program per SECNAVINST 5000.35B. Navy IPO's internal controls program is properly documented, and fully addresses the "program funding control" issue noted. Recommend the draft report be modified to reflect Navy's compliance.

Page 11: Issue: We do not believe "random" methodology used to project that "150 program elements, valued at \$93 billion, have cooperative potential" provides a true picture of the potential for cooperation in Navy programs. At best, it is a very crude analysis of the number of programs that could/should really 'go cooperative'.

Recommendation: Add statement that indicates the quantitative "results" from this analysis are only accurate as a projected "order of magnitude" regarding potential DOD cooperative programs.

Page 13: Issue: The statement, "as the focal point, the Deputy Under Secretary [(International Programs)] is prohibited from enforcing time frames for Military Departments to respond to proposed guidance and MOUs" is misleading. DUSD(IP) routinely provides guidance regarding MOUs to the Military Departments (MILDEPS) that is rigorously adhered to within Navy.

Recommendation: Delete sentence.

Page 14: Comment: We strongly concur with DOD IG comments regarding MOU process problems under "Approving MOUs", and request DOD take prompt action to address these issues as part of its MOU streamlining efforts.

The Assistant Secretary of the Navy for Research, Development
and Acquisition Comments (continued)

Final Report
Reference
Page No.

Page 17: Issue: The "square root" formula used by several European allies, and adopted by DOD IG for its savings calculations, is not based on any type of analytical study of actual cooperative program savings. In fact, it is just a handy, simple mathematical function that Europeans use to establish rough order of magnitude savings calculations.

Recommendation: Add statement that indicates the quantitative "results" from this analysis are only accurate as a projected "order of magnitude" regarding potential DOD cooperative program savings. In general, we see the 11th figure as very conservative estimate of both actual and potential savings.

Page 28: Issue: As noted in our page 11 comment, the methodology used in Appendix B is of questionable utility in 'estimating' the number of potential DOD cooperative programs. For example, it is highly unlikely that the TRIDENT Submarine program will ever be a cooperative program candidate. Also note that "PHALANX Missile" is incorrect terminology; Close-in Weapons System (CIWS) should be used instead.

Recommendation: Add statement that indicates the quantitative "results" from this analysis are only accurate as a projected "order of magnitude" regarding potential DOD cooperative programs. Cite that individual program examples do not reflect a realistic view of where cooperation is feasible.

Page 29: Issue: The organization chart only displays the MILDEPs as one small element in the "Activities Involved in International Cooperative R&D" architecture, when in reality they are probably the most important element. Requirements, funding, and acquisition organization support for a potential cooperative program in a MILDEP have been shown time and again as the key indicators of its potential success or failure. In addition, only MILDEP international program organizations (not the MILDEP itself) deals with DUSD(IP) on a regular basis, and this is a "dotted line" versus a "solid line" reporting relationship.

Recommendation: Revise report as appropriate to indicate importance of MILDEPs in international R&D cooperation activities. Revise organization chart reporting for MILDEPs as noted above.

**The Assistant Secretary of the Navy for Research, Development
and Acquisition Comments (continued)**

Final Report
Reference
Page No.

Page 32: Comment: In addition to the methodology comment noted page 17 above, the legends for the following programs should be corrected as follows:

MIDS - Multifunction Information Distribution System
NAAWS - NATO Anti-Air Warfare System

Page 33: Comment: In the second column, "conflicts" is misspelled.

Page 35 Comment: Request add "Deputy Assistant Secretary of the Navy (International Policy)" as an activity visited or contacted.

Page 37: Comment: Request add "Deputy Assistant Secretary of the Navy (International Policy)" and "Navy International Programs Office" to report distribution.

Department of the Air Force Comments

Final Report
Reference
Page No.



DEPARTMENT OF THE AIR FORCE
WASHINGTON DC



OFFICE OF THE ASSISTANT SECRETARY

JUL 01 1992

MEMORANDUM FOR DOD INSPECTOR GENERAL, ACQUISITION MANAGEMENT DIRECTORATE (MR DONALD REED)

SUBJECT: Comments on Draft Report on the Audit of International Cooperative Research
and Development (Project No. 1AB-0055, May 6, 1992) - ACTION
MEMORANDUM

We have reviewed the attached draft audit report and request that the following comment be considered prior to final publication of your findings. We concur with your recommendation on page 20, *"Directors of Defense Agencies and the Service Acquisition Executives designate one office to review acquisition plans to ensure that adequate consideration has been given to establishing a cooperative program and to report the results to appropriate decision makers"*. As outlined in our letter to the Assistant Inspector General for Auditing (Atch 1), internal AF controls are effective in accomplishing this function.

As we strive to get the most from our development and procurement investments, we will pursue cooperative opportunities through close interaction with the requirements process, our field organizations, and our acquisition programs. This process is not just a square-filler, but will be a catalyst for investigating and exploiting these opportunities early in the research and development process.

LARRY G. ROSELAND, Lt Col, USAF
Deputy Chief, Intl Programs Division
Asst Secretary of the Air Force
(Acquisition)

1 Atch
Ltr to Asst. IG (Auditing) with atch

cc: SAF/AQXA
SAF/AQT (Mr Flynn)
AF/XORJ (Lt Col Chapman)
HQ AFM/C/IA & STI

Department of the Air Force Comments (continued)

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Page No.



DEPARTMENT OF THE AIR FORCE WASHINGTON DC



JUN 9 1992

OFFICE OF THE ASSISTANT SECRETARY

MEMORANDUM FOR ASSISTANT INSPECTOR GENERAL FOR AUDITING, OFFICE OF THE INSPECTOR GENERAL, DEPARTMENT OF DEFENSE

SUBJECT: Comments on Foreign Weapons Evaluation in the Department of Defense,
Audit Report No. 92-049, February 19, 1992 - ACTION MEMORANDUM

This is in reply to the subject audit report and your memorandum for Assistant Secretary of the Air Force (Financial Management and Comptroller). As we strive to get the most from our development and procurement investments, we believe that we adequately consider domestic and foreign Non-Developmental Items (NDIs) which meet AF needs and can be procured for our operational use.

We concur with your recommendation 2a, *"Designate an office, such as the International Programs Office, with authority and responsibility to review acquisition plans to ensure that adequate consideration has been given to foreign NDI and to report results to appropriate decision authorities"*. Internal HQ Air Force review controls are effective in ensuring that domestic and foreign NDIs are properly considered, tested and procured when feasible, and we accomplish this without adding another management layer that would be inefficient and contrary to the Defense Management Review findings. During the Mission Need Statement (MNS) validation process, AF/XORJ follows the guidance of AF Regulation (AFR) 57-1 which defines the hierarchy of methods (same list as in DoDD 5000.1 which states that NDI is to be considered) for meeting the need. If the MNS is validated and becomes an acquisition program, AFR 800-1 designates that SAF/AQ, as the Air Force Acquisition Executive (AFAE), is responsible for implementing actions for nondevelopmental acquisitions. The AFAE holds each Program Manager (PM) accountable for this assurance, and program progression depends on it. OSD and the Services have initiated an effort to improve the NDI process by designating the Competition Advocate as the Commercial and NDI Advocate. As part of the Competition Advocate's normal authority and responsibility, he will review acquisition plans to ensure adequate consideration has been given to using commercial and other nondevelopmental items (Atch 1).

We agree with the intent of your recommendation (2b), *"Require program managers to purchase existing domestic or foreign systems, subsystems, or components that meet Military Department requirements, instead of initiating or continuing development"*. DoDD 5000.1 and DoDI 5000.2 require PMs to consider the use of domestic or foreign NDI components prior to initiating a new development program. The AF PM must then report results to the appropriate decision authorities. SAF/AQXI and AF/XORJ review the Program Management Directive (the HQ tasking to the PM and major and supporting commands) of all Air Force programs and ensure that the program offices are being directed to investigate and report on potential use of domestic and foreign NDIs (per HOI 800-2). Since 30 Oct 91, SAF/AQXI has added specific direction (Atch 2) to 36 PMDs and verified that all others properly included such direction. In addition, as stated above, the AF Competition Advocate

Department of the Air Force Comments (continued)

**Final Report
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Page No.**

will review the acquisition plans to ensure adequate consideration has been given to using commercial and other nondevelopmental items.

We will continue to seek and test additional domestic and foreign NDIs which meet AF needs and do not impact potential future reconstitution of the US industrial base. We will pursue these opportunities through close interaction with the requirements process, our field organizations, and our acquisition programs. This process is not just a square-filler, but will be a catalyst for investigating and exploiting these opportunities early in the development process.



DANIEL S. RAK
Deputy Assistant Secretary
(Acquisition)

2 Atch
1. OSD Commercial Procurement Package
2. Sample PMD Review Comments

cc: SAF/AQXA
 SAF/AQT (Mr Flynn)
 AF/XORJ (Lt Col Chapman)
 HQ AFSC/XTI
 HQ AFMC(I)/IA & STI

Department of the Air Force Comments (continued)

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OFFICE OF THE SECRETARY OF DEFENSE

WASHINGTON, D.C. 20301

April 16, 1992

MEMORANDUM FOR THE DEPUTY SECRETARY OF DEFENSE

FROM: DAVID S. ADDINGTON
SUBJECT: Commercial Procurement

The laws of the United States, DOD Directive 5000.1, the Packard Commission Report, and the Secretary's July 1989 Defense Management Report to the President emphasize the importance of making maximum practicable use of commercial and other nondevelopmental items in defense acquisition. The Department's implementation of its existing commercial procurement policy would benefit from the same kind of emphasis that the law gave to competition policies by the establishment of "advocates for competition." This can be accomplished without additional personnel, layering of the management structure, or interference with the streamlined acquisition chain of authority.

Commercial Procurement Policy

Section 2325(a) of Title 10 of the U.S. Code (Tab 1) provides that "(a) The Secretary of Defense shall ensure that, to the maximum extent practicable--

- "(1) requirements of the Department of Defense with respect to a procurement of supplies are stated in terms of--
 - "(A) functions to be performed;
 - "(B) performance required; or
 - "(C) essential physical characteristics;
- "(2) such requirements are defined so that nondevelopmental items may be procured to fill such requirements;
- "(3) such requirements are fulfilled through the procurement of nondevelopmental items; and
- "(4) prior to developing new specifications, the Department conducts market research to determine whether nondevelopmental items are available or could be modified to meet agency needs."

Department of the Air Force Comments (continued)

Final Report
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Page No.

The Secretary's July 1989 Defense Management Report to the President (Tab 2) cited the Packard Commission report as emphasizing the need for greater reliance on commercially-available products:

"In regard to procurement policy, the Packard Commission emphasized specific reforms in two areas:

- substantially greater reliance on *commercially available products*, often well-suited to DOD's needs and obtainable at much less cost;
- and adoption of *competitive practices* predicated more broadly on a mix of cost, past performance and other considerations that determine the overall "best value" to the government." (emphasis in original)

Department of Defense Directive 5000.1, Part 1 (Tab 3) states that:

"Maximum practicable use shall be made of commercial and other nondevelopmental items. In describing these items, maximum practicable use shall be made of non-Government standards and commercial item descriptions."

Advancing the Commercial Procurement Policy

Section 20 of Public Law 93-400, as amended (41 U.S.C. 418)(Tab 4) established for each executive agency an "advocate for competition" (hereafter called the "competition officer"). The law assigns that competition officer the duty to: (1) promote use of competition, (2) review procurement activities, (3) identify and report on opportunities for competition and on conditions unnecessarily restricting competition, (4) prepare an annual report, (5) recommend goals and plans to increase competition, (6) recommend a system for personal and organizational accountability for competition; and (7) describe ways in which the agency has emphasized competition in procurement training and research. The competition officer for each procuring activity by law "shall be responsible for challenging barriers to and promoting full and open competition in the procuring activity, including unnecessarily detailed specifications and unnecessarily restrictive statements of need." Section 2318 of Title 10 of the U.S. Code established a competition officer for the Defense Logistics Agency (DLA) with the same duties as the competition officers under Section 20 of the Public Law 93-400. DOD Instruction 5000.2 provides for competition officers for procurement activities other than the Military Departments and DLA.

Within DOD, the Secretaries of the Military Departments have designated as the statutory competition officer an official known as the Competition Advocate General (Dept. of the Army General Order No. 17 and Army FARS Supp. 6.501, SECNAV Instruction 4210.10, Air Force Regulation 800-35) and the Director of the Defense Logistics Agency has designated the DLA Competition Advocate (DLA Regulation 4105.17). The law permits the assignment of additional duties to the competition officer, as long as the duties are not inconsistent with their statutory duties. Assignment to the competition officer of the duty to promote use of commercial and other nondevelopmental items is fully consistent with the officer's statutory duty to promote competition. By assigning to the existing competition officer the duty to promote use of commercial and other nondevelopmental items, renewed emphasis on use of commercial and other nondevelopmental items can be achieved without additional personnel, layering of the management structure, and interference with the streamlined acquisition chain of authority.

Department of the Air Force Comments (continued)

Final Report
Reference
Page No.

RECOMMENDATION

I recommend that you sign the attached memorandum (Tab 6) reemphasizing DOD policy on commercial procurement and assigning to the Department's competition officers the additional duties of supporting the use of commercial and other nondevelopmental items.

COORDINATION

SECARMY SECNAV SECAF ^{all below} ~~all~~ USD(A) GC

DEPSECDEF DECISION

Approved

Disapproved

Other: _____

Concur re Competition Advocate
as advocate for NDI provided
this does not supersede the
ongoing Defense Standardization
program DR
4/23/92

(What Sec Rice sent to OSD)

I-3

Department of the Air Force Comments (continued)

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Page No.

AFP 57-1 1 July, 1992 14

d. Scheduling.

The CSAF, AFAE, or HQ USAF/XO may schedule a summit. It is convened before Milestones I, II, and III, and at other times deemed proper. The membership (specified in a above) must coordinate on proposed summits and CSAF approve them. As a general guide, summits should be scheduled at least 180 days before the next scheduled JROC or DAB review. Planning for summits should begin at least 60 days or more in advance of the meeting.

e. Administration.

HQ USAF/XOR must schedule, conduct, and administer the initial Summit held before Milestone I. For all later milestones, subject matters, and mission areas, the applicable SAF/AQ mission area director must nominate summit reviews, arrange for scheduling and planning, and serve as the focal point for all issues requiring resolution. HQ USAF/XOR or the respective mission area director must provide specific guidance for a summit (briefing times, formats, content, etc.). SAF/AQ is OPR for Summit guidance and "lessons learned." The operating command must present operational matters. The operating command will present the evolution and rationale for the specific solution by tracing the initial need stated in the MNS from national military strategy to specific solution characteristics and capabilities using a "strategy-to-task" approach.

12. Non-Developmental Item (NDI) Acquisitions.

NDIs are systems and subsystems available from a variety of sources requiring little or no development effort to meet Air Force requirements. They include "commercial off the shelf" (COTS) items, prototyping of such items, and items in development or in use by other Services, government agencies, and our allies.

a. Use of NDI

The use of NDI is encouraged. NDI systems, subsystems, components, and technologies enhance the economy of DOD resources by minimizing R&D efforts requiring additional time and monies. Other benefits include economies of scale (more for less), proven, mature capabilities, and greater use of standardized, common systems and equipment.

b. DAB or AFSARC Approval

Subject to DAB or AFAE approval, an NDI program may proceed to MS III following a successful MS I decision. Document level of detail may be less when pursuing NDI solutions; therefore, consult with HQ USAF/XOR and SAF/AQ for specific applications.

c. Applicability.

Operating commands, in identifying and documenting mission deficiencies in MNS, COEA, and ORD and RCM documents, will consider the use and applicability of NDI and (or) COTS items, Foreign Comparative Test (FCT)

Program, and NATO Cooperative Programs. Additional information on the NDI process can be found in DOD Instruction 5000.2 and SD-2, NDI Buying. SD-2 is available from the Naval Publications and Forms Center, 5801 Tabor Avenue, Philadelphia PA 19120-5099, or telephone DSN 442-2179 for assistance.

13. Foreign Comparative Test (FCT) Program.

The FCT program is a DOD-funded program providing the Services an opportunity to test foreign-manufactured weapon systems, subsystems, components, munitions, equipment items, or foreign developed technologies.

a. Identifying FCT Candidates.

Air Force personnel assigned to foreign nations are encouraged to identify FCT candidates to meet validated US Air Force needs and requirements and which may offer distinct benefits. To assist these personnel in identifying validated items, send sanitized MNS to the FCT liaison offices depicted at attachment 10.

b. Processing FCT Requirements.

FCT personnel should forward relevant information on foreign-developed capabilities and technologies to the respective MAJCOM focal point listed at attachment 10 for requirements falling within the purview of this regulation. SAF/AQX, with HQ USAF/XOR, approves specific procedures for handling international cooperative development programs on a case-by-case basis. For NATO cooperative development programs, the requirements process defined in this regulation must support the US Air Force interface with the Periodic Armament Planning System (PAPS) (paragraph 3i).

14. Human Systems Integration Plan (HSIP).

The purpose of the HSIP is for the operating command to address potential manpower, personnel, training, and safety constraints. There is also a preliminary version of the HSIP called the P-HSIP. AFR 26-1, volume 3, contains reporting requirements and formats. Up to MS 0, this process is meant to be very approximate and nontime-consuming because of the lack of specificity associated with the MNS process. After Milestone 0, a more in-depth analysis may be required. The operating command should anticipate support from Product Center XRs (Directorate of Requirements) and AFMC/XR during this effort. P-HSIPs developed at Milestones 0 and I serve as a point of departure for the HSIPs developed at succeeding milestones.

15. Intelligence Requirements.

Intelligence infrastructure components include data flow and data bases; target materials; mapping, charting and geodesy; system interfaces; security classification; personnel and training. To ensure full system capability, identify required components early (attachment 6).

Department of the Air Force Comments (continued)

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Page No.



DEPARTMENT OF THE AIR FORCE
WASHINGTON DC 20330-1000

OFFICE OF THE ASSISTANT SECRETARY

OCT 30 1991

MEMORANDUM FOR SAF/AQT

SUBJECT: Comments on draft PMD - ACTION MEMORANDUM

We have reviewed PMD Number 2028(34) PE 63203F and recommend the actions as checked below:

✓ Add the following statement to the paragraph indicated.

New Para 3.a.(3) "Investigate sources of domestic/foreign non-developmental items that satisfy the objectives of this PMD.
Provide a summary of significant findings and forward all candidate proposals for evaluating foreign non-developmental items in accordance with DODM 5000.3-M-2, "Foreign Weapons Evaluation and NATO Comparative Test Programs Procedures Manual," through the Program Officer to SAF/AQXI."

✓ Please provide a copy of the final signed PMD to SAF/AQXI.
✓ We are also returning the draft PMD annotated with our minor comments and/or recommended changes.

My action officer for this PMD review is Lt Col Larry G. Roseland, SAF/AQXI, 695-2181.

John G. Bostick
for GEORGE W. CRISS, III, Col, USAF
Chief, International Programs Div
Asst Secretary of the Air Force
(Acquisition)

Defense Security Assistance Agency Comments

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Page No.



DEFENSE SECURITY ASSISTANCE AGENCY

WASHINGTON, DC 20301-2800

30 JUN 1992

In reply refer to:
I-02880/92

MEMORANDUM FOR OFFICE OF THE INSPECTOR GENERAL, DIRECTOR,
ACQUISITION MANAGEMENT DIRECTORATE

SUBJECT: Draft Audit Report on the Audit on International
Cooperative Research and Development (Project No. 1AB-
0055)

DSAA has reviewed subject draft audit report and offers the
following comments for inclusion in the final report.

10, para 2

Recommendation 1.d. of the report, to realign the Offices of
Defense Cooperation under the Deputy Under Secretary of Defense
for Acquisition (International Programs), is of primary concern
to DSAA.

First, in clarification, it must be pointed out that "Office
of Defense Cooperation (ODC)" is but one of a number of names for
the Security Assistance Organizations (SAOs) established
worldwide under the authority of the Foreign Assistance Act of
1961. The draft report incorrectly uses the term "ODC" to
designate only those SAOs which have Defense Cooperation in
Armaments (DCA) personnel; in fact, the various names for the
SAOs reflect, in each instance, the political relationship
between the USG and the host country and are no indication
whatsoever of whether a particular SAO has assigned DCA
responsibilities or personnel.

There are currently fifty-five SAOs assigned to US Embassies
worldwide; of those, sixteen European and Pacific Command SAOs
have DCA personnel. These sixteen offices have a total of 272 US
military and civilian personnel and Foreign Service National
employees, of whom only 49 (or 14%) are in DCA positions. More
than 75% of the personnel are supported with security assistance
(SA) funds, a reflection that SA, not DCA, is the primary mission
of these offices. (A listing of personnel authorizations for
these SAOs is at Tab A.)

Realigning sixteen of the fifty-five SAOs under DUSD(A)/IP
is neither appropriate nor advisable. It is also unnecessary in
the accomplishment of the objective to facilitate international
cooperative programs. Chapter 3 of the Security Assistance
Management Manual, DoD 5105.38-M, (Tab B) acknowledges DCA as a
unit mission for SAOs and establishes channels of communication
and authority for accomplishing that mission.

Given the small proportion of DCA personnel attached to only
a few SAOs and the existence of established authority and

Defense Security Assistance Agency Comments (continued)

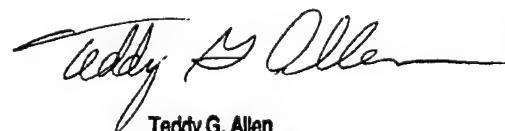
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10, para 2

relationships for the DCA mission, DSAA cannot support recommendation 1.d..

Further, DSAA cannot concur with recommendation 1.a., which proposes to delegate to DUSD(A)IP "the authority to resolve conflicts that arise over both the issuance of guidance and the establishment of cooperative programs pertaining to International Cooperation". As written, it could be interpreted to allow DUSD(A)IP to ignore the legitimate concerns and statutory authority of the MILDEPs, JCS, DOD General Counsel, DOD Comptroller, USD(P), and even USD(A), etc., in matters of International Cooperation (an apparent proper term which is nowhere defined in the report). The appropriate level for resolution of conflict is the DepSecDef. To tamper with this system of checks and balances is to tamper with the very structure of decision-making within the Department of Defense.

The draft report also contains a number of minor factual inaccuracies, which are addressed at Tab C, but it is our overriding concern with recommendations 1.a. and 1.d. that causes DSAA to nonconcur with this draft audit report.



Teddy G. Allen
Lieutenant General, USA
Director

Defense Security Assistance Agency Comments (continued)

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DEFENSE COOPERATION IN ARMAMENTS

AUTHORIZATIONS

The following chart lists SA-funded positions, followed by O&M-funded positions in parentheses.

<u>SAO</u>	<u>US Military</u>	<u>US Civilian</u>	<u>Local Civ</u>	<u>Total</u>
<u>Pacific Command:</u>				
Indonesia	10(1)	1	15	26(1)
Japan	5	4(2)	5	14(2)
Korea	36(3)	11(1)	28	75(4)
<u>European Command:</u>				
Belgium	2(1)	1(2)	4(1)	7(4)
Denmark	1(2)	1(1)	2	4(3)
France	1(2)	1(3)	5	7(5)
Germany	5(1)	3(2)	5(2)	13(5)
Greece	11(3)	4(2)	10(2)	25(7)
Israel	0	0(2)	0	0(2)
Italy	3(4)	0(4)	4(1)	7(9)
Netherlands	3(3)	1(1)	2(1)	6(5)
Norway	2(3)	0(2)	2	4(5)
Portugal	9(1)	3(1)	7	19(2)
Spain	4(12)	2(6)	1(9)	7(27)
Turkey	33(5)	6	16(1)	55(6)
United Kingdom	2(1)	1(2)	0	3(3)

NOTE: Figures in parentheses show all O&M-funded spaces, to include DCA.

	<u>US Military</u>	<u>US Civilian</u>	<u>Local Civ</u>	<u>Total</u>
SA-Funded	127	39	106	272
DCA	26	19	4	49
Other O&M-Funded	16	12	13	41
TOTAL	169	70	123	362
(%DCA)	(15%)	(27%)	(3%)	(14%)
(%SA)	(75%)	(56%)	(86%)	(75%)

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TABLE 300-2
ARMAMENTS COOPERATION DECISION RELATIONSHIPS FOR SAOs

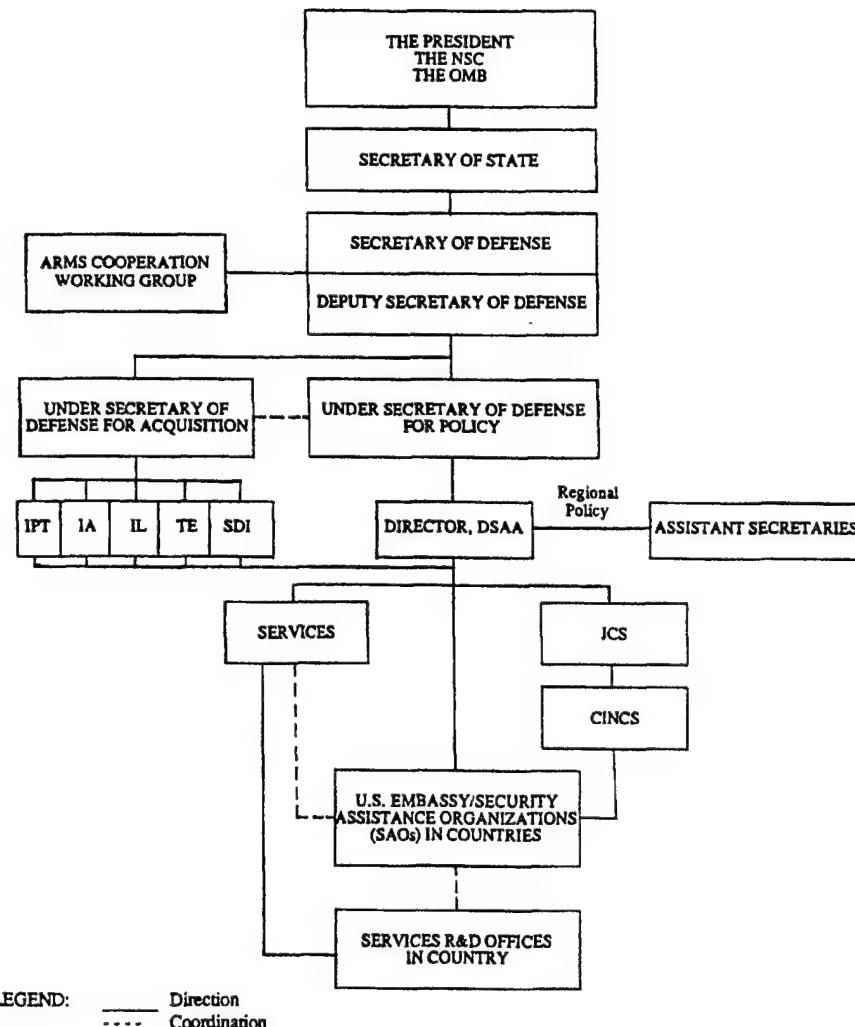


TABLE 300-2. Armaments Cooperation Decision Relationships for SAOs.

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TABLE 300-3
ARMAMENTS COOPERATION PROGRAMS

<u>TYPE OF PROGRAM</u>	<u>RESPONSIBLE OFFICE</u>
1. U.S. development and acquisition, involving the expenditure of U.S. funds, or equivalent compensation, to acquire foreign technical information or components.	USD(A)
2. Joint U.S./foreign development programs involving shared efforts and expenditure of U.S. funds or equivalent compensation.	USD(A)
3. Foreign production of U.S. designed equipment (i.e., coproduction) under predominantly commercial arrangements with shared product improvement potential involving U.S. funds committed or anticipated.	USD(A)
4. Foreign production of U.S. designed equipment, under either commercial or FMS arrangements, with no U.S. program or commitments involved (but with flowback included without charge).	DSAA
5. Foreign production of U.S. designed equipment (i.e., coproduction with anticipated or committed U.S. second source utilization (foreign countries acquisition of U.S. data or equipment by means of either commercial or FMS arrangement is secondary issue).	USD(A)
6. Foreign production of U.S. designed equipment (i.e., coproduction) where principal issue is acquisition of data or equipment from U.S. sources, via FMS or commercial, without U.S. commitment or funding for second source.	DSAA
7. Sale of U.S. equipment or services in order to further the foreign production of U.S. designed equipment with no U.S. commitment or funding involved.	DSAA
8. Cooperative logistics support arrangements for alliance fielded equipments.	ASD (P&L)

TABLE 300-3. Armaments Cooperation Programs.

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**Additional Comments on the Draft Audit Report
on the
Audit of International Cooperative Research and Development
Project No. IAB-0055**

Page 2, 2nd paragraph, first sentence: It is DSAA's understanding that the 1986 SecDef memorandum on NATO cooperative projects was intended to implement Section 27 of the Arms Export Control Act, not the 1985 policy memorandum cited.

Page 12 and 13, under "Designation of Primary Office": The use of the word "departments" is misleading, since it calls to mind "military department"; the two elements referred to here need to be clearly identified. Also, the last sentence of the section needs clarification - the last clause states that "the offices that can best assist in developing cooperative programs with U.S. allies have not been effectively used". Which offices are these?

Page 13, under "Issuing Guidance", third line from bottom: Please correct the sentence on draft DoD Directive 2000.9 to read "...under revision by the Defense Security Assistance Agency and the Office of the Deputy Under Secretary of Defense for Acquisition (International Programs)...". DoD Directive 2000.9 will be published as a joint USD(A)/USD(P) directive and has been appropriately drafted and coordinated by both action offices.

Page 15, "Identifying offices involved with allies": Correct text using accurate nomenclature and reflecting correct lines of communication, as indicated in our cover memorandum (including the chart at Tab B).

Department of Defense Strategic Defense Initiative Organization Comments

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DEPARTMENT OF DEFENSE
STRATEGIC DEFENSE INITIATIVE ORGANIZATION
WASHINGTON, DC 20301-7100

JUN 9 1992

MEMORANDUM FOR DIRECTOR, ACQUISITION MANAGEMENT DIRECTORATE, DOD
INSPECTOR GENERAL

SUBJECT: Draft Audit Report on the Audit of International Cooperative Research and Development (Project No. 1AB-0055)

Reference your memorandum of May 6, 1992, subject as above. The Strategic Defense Initiative Organization (SDIO) has no objections to the recommendations in the draft subject report and provides the following comments that summarize SDIO's concerted activities which comply with the Inspector General's recommendation for Directors of Defense Agencies to "... ensure adequate consideration has been given to establishing a cooperative program....."

-International involvement in Strategic Defense Initiative (SDI) has been a cornerstone which had its origin in the President's speech to the American people in 1983. Within the SDIO, a dedicated and responsive multinational office was established to specifically promote and facilitate SDI international participation. Since 1985, SDIO has concluded several overarching Memoranda of Understanding (MOUs) with foreign governments, which, although not necessary for foreign participation in SDI, do facilitate their firm's participation in SDI research, technology development, test and evaluation, and deployment.

-International participation in SDI covers a wide range to include cooperation on major systems, reciprocal exchanging of technical information, and several broad multinational activities in between. For example, SDIO is in the process of completing draft Cooperative Opportunity Documents to support the defense acquisition review process for SDIO's six major defense acquisition programs. In that regard, it is noteworthy that a foreign consortium, EUROSAM, is proposing as a prime contractor to conduct a CORPS SAM concept definition study based on the European ASTER/ARABEL medium-range ATBM missile and radar system.

-Although international opportunities to participate at the major systems level, e.g., CORPS SAM, are limited because our friends and allies have not yet developed or deployed applicable ballistic missile defense systems and/or because of U.S. national security concerns, nevertheless robust opportunities are

Department of Defense Strategic Defense Initiative Organization Comments (continued)

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provided by SDIO and its executing agents for foreign firms to participate widely as contractors or subcontractors to U.S. firms.

-Specifically, SDIO reviews and must approve recommendations to restrict or exclude foreign participation in all SDIO sponsored competitive procurements before each procurement is formally advertised. This also applies to procurements executed by the services and other defense agencies on behalf of SDIO. As a result, most SDIO and executing agency procurements that are not restricted by national disclosure concerns provide at least an opportunity for foreign firms to participate as prospective subcontractors. As a result, SDIO has gained valuable access to broad-based foreign technologies through foreign participation in SDI procurements. For example, since 1986, over 300 contracts have been awarded to foreign firms which have an aggregate contract value exceeding \$800 million.

-Additionally SDIO is aligned with several nations on cooperative research and development. The largest and most publicised of these cooperative R&D programs are with the Israeli Ministry of Defense for both the Arrow ATBM and the Arrow Continuation Experiments (ACES). However, there are several smaller programs that also offer significant benefits to SDIO, e.g. the cooperative program with The Netherlands on hypervelocity gun development. On the lower end of the cooperative R&D scale SDIO is cooperating with the United Kingdom on a technical information exchange program entitled SDI Cooperative Research Exchange (SCORE). The objective of this technical information exchange program is to share, on a reciprocal basis, technical data in five broad areas: key technologies, systems, directed energy, sensors and interceptors, and countermeasures.

As the magnitude and breadth of SDIO's international activities demonstrate, SDIO wholeheartedly supports the Inspector General's contention that international cooperation can reduce the overall costs of weapon systems while achieving interoperability. The international contributions to SDI have without question provided advanced technologies and opportunities for interoperability necessary to achieve effective and credible systems for protecting the U.S. and allies from the threat of offensive ballistic missiles.

Ray L. Cadell

RAY L. CADELL
Colonel, USAF
Director
Management Operations

Defense Advanced Research Projects Agency Comments

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DEFENSE ADVANCED RESEARCH PROJECTS AGENCY
3701 NORTH FAIRFAX DRIVE
ARLINGTON, VA 22203-1714



JUN 12 1992

MEMORANDUM FOR DIRECTOR, ACQUISITION MANAGEMENT DIRECTORATE, DODIG
SUBJECT: Draft Audit Report on the Audit of International
Cooperative Research and Development

In response to your memorandum of May 6, 1992, this Agency has reviewed the subject draft report and has no comment on recommendation 2. As requested in your memorandum, we do wish to make the following observations.

9, para 3

Calculation of monetary benefits associated with the proposed corrective actions cannot be accomplished with any degree of accuracy. In addition to the funding contributions made by our allies to these joint programs, they provided in-kind services for which no dollar costs are identifiable. We have no way of quantifying any monetary savings from the performance of these services. In addition, fluctuations in exchange rates would render any contrived calculated value to be meaningless over time.

3, para 3

The conclusion that a material internal control weakness exists within DoD's acquisition planning process because allied participation may not have been considered before the decision to begin a major acquisition program is made, may or may not be valid. However, this evaluation would not necessarily be applicable to the many nonmajor research and development efforts that do not require an acquisition plan.

8, para 3

The draft report also implies (page 16) that because the "acquisition regulations do not require research and development activities, such as DARPA and Military Department laboratories, to identify and consider cooperative opportunities to meet their requirements," that DARPA does not or has not participated in allied cooperative programs. This is not true. DARPA has been actively involved in 4 of the 64 DoD programs funded from the Nunn Amendment and has successfully undertaken from direct appropriated funds over a dozen other nonmajor programs with our allies.

Thank you for providing us with the opportunity to comment on the draft report. Any questions regarding our comments should be directed to Mr. Jim Fargo, 696-2393.

Gary L. Denman
Gary L. Denman
Director

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Defense Information Systems Agency Comments

Final Report
Reference
Page No.



IN REPLY
REFER TO: CM

DEFENSE INFORMATION SYSTEMS AGENCY

701 S. COURT HOUSE ROAD
ARLINGTON, VA 22204-2199

29 JUN 1992

MEMORANDUM FOR INSPECTOR GENERAL, DEPARTMENT OF DEFENSE
ATTN: Director, Acquisition Management Directorate

SUBJECT: Draft Report on the Audit of International Cooperative Research
and Development (Project No. IAB-0055)

Reference: DoDIG Memo, subject as above, 6 May 92

As requested by the reference, the Defense Information Systems Agency has
reviewed the subject draft report. Our comments are contained at the
enclosure. If you have questions regarding the response, contact
Ms. Sandi Leicht, DISA Audit Liaison, on 692-2172.

FOR THE DIRECTOR:

1 Enclosure a/s

for Edmund P. Cady
GEORGE J. HOFFMAN
Comptroller

Defense Information Systems Agency Comments (continued)

Final Report
Reference
Page No.

10, para 2

**DISA'S COMMENTS ON DRAFT AUDIT REPORT ON
INTERNATIONAL COOPERATIVE RESEARCH AND DEVELOPMENT
(PROJECT NO. 1AB-0055)**

1. Recommendation 2.: Concur In Part. The recommendation states that Defense agencies establish one office to review acquisition plans to ensure that adequate consideration has been given to establishing a cooperative development program. Although we agree with the basic principle, agencies as large and diverse as DISA require more than a single office to cover the entire agency. For example, the Joint Interoperability and Engineering Organization (JIEO) has a NATO C3 Liaison Office and the Center for Standards has an individual who oversees international programs. Therefore, DISA's position is that we should maintain the two offices. However, we agree that coordination between the two offices should be maintained to ensure adequate coordination between NATO and other international programs.

Furthermore, the Defense agencies should be considering more than acquisition plans. They should be considering all aspects of their business that have the potential for international cooperative programs. For example, one of JIEO's concerns is C3 interoperability. JIEO is looking at ways to establish international cooperative programs to resolve interoperability issues of mutual interest to the U.S. and its allies.

2. Other comments, based upon findings in the report:

a. There is a lack of high level support for cooperative programs. The reasons for this are:

(1) A lack of "education" in the importance of international cooperation. Education must start early in one's career; today's leaders must be made aware of the importance of cooperative programs by their leaders.

(2) An international program can take much longer than a U.S. only program. This is usually true because of the time it takes for nations to coordinate and establish national position. Proper planning and coordination can alleviate this situation. One must consider time versus benefits.

(3) The cost of doing business internationally. While the report talks of potential costs savings through cooperative research and development, it does not address the additional costs associated with doing business internationally such as travel and per diem, etc.

10, para 2

b. Other recommendations in the report that directly affect attempts to do business internationally are 1.b.: Task the Deputy Under Secretary (International Programs) to develop a plan to streamline MOU processing procedures, and 1.c.: Direct applicable offices to expedite the issuance of pending directives on international cooperation. The MOU processing procedures should be streamlined, and clear and concise directives on international cooperation are required. Both of these recommendations can improve the "image" of cooperative programs.

Enclosure

Defense Mapping Agency Comments

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Page No.



DEFENSE MAPPING AGENCY

8813 LEE HIGHWAY
FAIRFAX, VIRGINIA 22031-2137



CMMA

6/11

MEMORANDUM FOR INSPECTOR GENERAL, DEPARTMENT OF DEFENSE
ATTN: Assistant Inspector General for Auditing

SUBJECT: Draft Audit Report on the Audit of International
Cooperative Research and Development
(Project No. 1AB-0055)

Reference: Your memorandum and draft audit report, 6 May 1992,
subject as above.

10, para 2

1. The Defense Mapping Agency (DMA) has reviewed the referenced draft report and concurs with Recommendation #2, "... that the Directors of Defense Agencies and the Service Acquisition Executives designate one office to review acquisition plans to ensure that adequate consideration has been given to establishing a cooperative program and to report the results to appropriate decision makers."
2. Headquarters DMA, Directorate for Research and Engineering, is responsible for DMA research and development (R&D) programs and will be the primary office for ensuring that foreign cooperation is appropriately considered before initiating a U.S. R&D program.
3. If you have any questions, your staff may contact Ms. Regina Pentolino, DMA Office of Comptroller, Management Analysis Office, (301) 227-2275.

FOR THE DIRECTOR:

The signature of John R. Vaughn is written in cursive ink. It appears to read "John R. Vaughn".
JOHN R. VAUGHN
Comptroller

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Defense Nuclear Agency Comments

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Defense Nuclear Agency
6801 Telegraph Road
Alexandria, Virginia 22310-3398



IG

6 July 1992

MEMORANDUM FOR DEPARTMENT OF DEFENSE, INSPECTOR GENERAL

SUBJECT: Department of Defense Inspector General Draft Report
on the Audit of International Cooperative Research
and Development (Project No. 1AB-0055), dated
6 May 1992

We have reviewed the subject report and concur with the findings and recommendations. If you have any further questions, please call us at (703) 325-7096.

FOR THE DIRECTOR:

A handwritten signature in black ink, appearing to read "G. M. Zorbach".

G. M. ZORBACH
CAPT, USN
Inspector General

AUDIT TEAM MEMBERS

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Raymond A. Spencer, Program Director
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Belinda Finn, Team Leader
Jim Casey, Team Leader
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Jacqueline Wicecarver, Auditor
David Cole, Auditor

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